

# RAILROAD LABOR ARBITRATIONS

## REPORT

OF THE

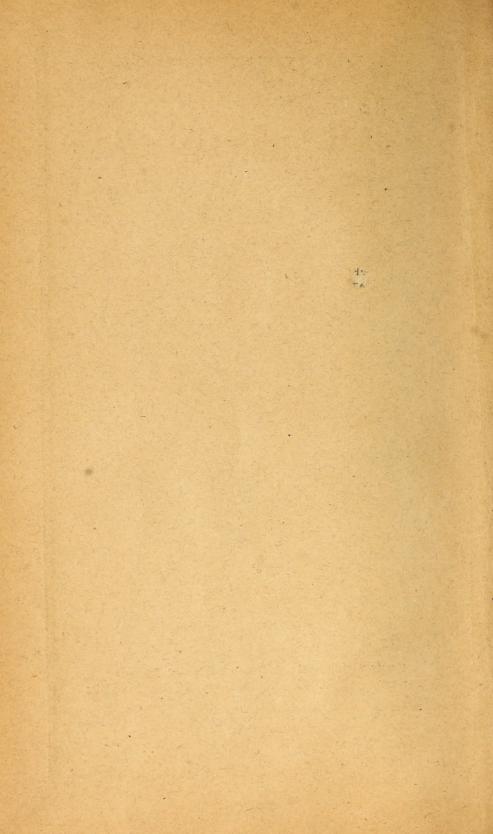
UNITED STATES BOARD OF MEDIATION AND CONCILIATION ON
THE EFFECTS OF ARBITRATION PROCEEDINGS UPON
RATES OF PAY AND WORKING CONDITIONS
OF RAILROAD EMPLOYEES



16-26811

MAY 15, 1916.—Referred to the Committee on Interstate Commerce
MAY 25, 1916.—Committee discharged, and referred to the Committee on Printing

WASHINGTON
GOVERNMENT PRINTING OFFICE
1916



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753

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UNITED STATES BOARD OF MEDIATION AND CONCILIATION ON
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RATES OF PAY AND WORKING CONDITIONS
OF RAILROAD EMPLOYEES

PREPARED UNDER THE DIRECTION OF THE BOARD

By

W. JETT LAUCK



MAY 15, 1916.—Referred to the Committee on Interstate Commerce
MAY 25, 1916.—Committee discharged, and referred to the Committee on Printing

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### REPORTED BY MR. FLETCHER.

In the Senate of the United States,

July 7 (calendar day, July 10), 1916.

Resolved, That the report submitted by the United States Board of Mediation and Conciliation on May 15, 1916, on "The Effects of Arbitration Proceedings upon Rates of Pay and Working Conditions of Railroad Employees," in response to Senate resolution No. 181, adopted May 3, 1916, be printed as a Senate document.

Attest:

James M. Baker, Secretary.

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#### LETTER OF TRANSMITTAL.

UNITED STATES BOARD OF MEDIATION AND CONCILIATION, Washington, May 12, 1916.

SIR: I have the honor to transmit herewith a report of the United States Board of Mediation and Conciliation on the effects of arbitration proceedings upon the rates of pay and working conditions of railroad employees, as directed by resolution of the Senate of May 3, 1916, which reads as follows:

Resolved, That the United States Board of Mediation and Conciliation be and is hereby directed to furnish for the use of the Senate a report upon wages and working conditions of railroad employees as affected by arbitrations under the act of Congress approved June first, eighteen hundred and ninety-eight, entitled "An act concerning carriers engaged in interstate commerce and their employees," and the act of Congress, approved July fifteenth, nineteen hundred and thirteen, entitled "An act providing for mediation, conciliation, and arbitration in controversies between certain employers and their employees."

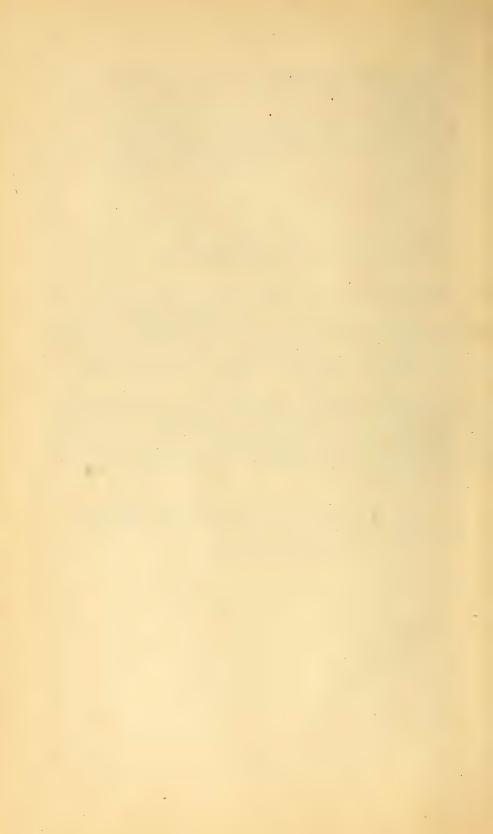
Respectfully,

W. L. CHAMBERS,

United States Commissioner of Mediation and Conciliation.

Hon. Thomas R. Marshall, President of the Senate.

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## RAILROAD LABOR ARBITRATIONS.

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#### INTRODUCTION.

#### SCOPE AND METHOD OF STUDY.

In the following pages a study has been made of the effects of arbitration proceedings upon the rates of pay and working conditions of railway employees. The scope of the study includes all arbitration proceedings held under the provisions of the Federal law. To the analysis of these arbitration proceedings has also been added a review of four other cases—the arbitration in 1911 between the Youngstown & Ohio River Railroad and its employees, the arbitration in 1912 between locomotive engineers and 52 railroads of the East, the arbitration in 1912 between the Georgia Railroad and its conductors and trainmen, and the arbitration in 1913 between the Norfolk & Western Railroad and its maintenance of way employees. Altogether the results of 25 formal arbitration proceedings, covering the period 1898–1915, have been analyzed.

The general method pursued has been to compare rates of pay and working conditions prior and subsequent to the awards of arbitration boards, with the object in view of ascertaining changes in rates of pay and working rules which were the outcome of the arbitration proceedings. The presentation of the results of such comparative analyses have been made under the following general heads for each

arbitration case:

(1) History of case.

(2) Articles of arbitration agreement.

(3) Testimony and argument of employees.(4) Testimony and argument of the railroads.

(5) Comparison of the requests of employees with the award of the arbitration board.

(6) The application of the award of the board to railroad operating

conditions.

(7) Changes in rates of pay and working conditions by individual railroads as the result of the arbitration award.

#### ASSISTANCE RECEIVED.

The cooperation of the executive officers of the railroad labor organizations and of the general managers of the railroad companies has been fully extended to the board in the course of the work. Without this assistance successful results would have been impossible.

#### HISTORY OF MEDIATION AND ARBITRATION LEGISLATION.

#### THE ACT OF 1888.

The first law dealing with the adjustment of controversies between transportation companies and their employees was approved October 1, 1888. It provided for voluntary arbitration and substantially for compulsory investigation. The law of 1888 provided that in the event of controversy either side might propose in writing to submit the differences to arbitration; and if the other party to the controversy should accept the proposition each side should then appoint one arbitrator and these two should select a third. The three persons thus selected were created a board of arbitration.

The board of arbitration was given all the power of administering oaths, subpænaing witnesses, requiring the production of papers, etc., that belong "to the United States commissioners appointed by the circuit court of the United States."

The act of 1888 provided that upon the conclusion of its investigation the decision of the board of arbitration should be publicly announced and a copy of it filed with the Commissioner of Labor of the United States. No provision of any kind was made for enforcing any award of the board, and the act evidently relied on the force of public opinion to make effective the decision of the arbitrators. In this respect the act of 1888 is similar to the Canadian act.

The act of 1888 provided also that the President might select two commissioners who, together with the United States Commissioner of Labor, should "constitute a temporary commission for the purpose of examining the causes of the controversy, the conditions accompanying, and the best means for adjusting it." The report of the commission was to be transmitted to the President and to the Congress. The services of such commission might be tendered by the President for the purpose of settling a controversy "either upon his own motion or upon the application of one of the parties to the controversy or upon the application of the executive of the State." A commission thus created by the President was given all the power and authority given to the board of arbitration. The commission's decision was to be made public and was "to advise the respective parties what, if anything, ought to be done or submitted to by either or both to adjust the matters in dispute." As in the case of the arbitration boards, no means were afforded for enforcing the decisions of these special commissions.

The provisions of this act were never utilized.

#### THE ERDMAN LAW.

The Federal law which superseded the act of 1888 is commonly known as the Erdman Act.<sup>2</sup> This law provided means for the mediation and arbitration of controversies affecting railways and their train-service employees and was the basis of existing legislation. was enacted in June, 1898. During the first eight and a half years following the passage of the law only one attempt was made to

Mediation and Arbitration of Railway Labor Disputes in the United States, by Charles P. Neill, Bulletin No. 98, U. S. Bureau of Labor.
 See appendix.

utilize it. Within the next five years, however, its provisions were invoked more than 60 times, the effectiveness of the law established, and methods of procedure under its provisions fully developed.

#### THE PROVISIONS OF THE ERDMAN LAW.

The scope of this law included only employees directly engaged in the movement of trains—engineers, firemen, conductors, trainmen, switchmen, and telegraphers. The mediation proceedings were purely voluntary. Either party to a controversy might invoke the assistance of the Federal mediators, the chairman of the Interstate Commerce Commission, and the Commissioner of Labor. The mediators had no power to intervene in any controversy upon their own initiative. Their activities "were conditioned, first, upon the receipt of a request for mediation under the law from one of the parties to the controversy, and, second, upon the acceptance by the other party of the mediators tender of friendly offices." <sup>1</sup>

#### PROCEDURE UNDER THE ERDMAN LAW.

The course of procedure for the peaceable settlement of wage disputes under the Erdman law was followed under the provisions of subsequent legislation. It has been well described in a bulletin issued by the Bureau of Labor, which may be quoted in order that the prevailing methods of adjustment of controversies may be fully understood:

The course through which the mediation provisions of the Erdman Act are invoked is ordinarily somewhat as follows: A controversy arises between a railroad company and one or more classes of its employees coming within the provisions of the act. controversy may relate to proposed changes in the existing rates of pay or the existing regulations governing working conditions, or it may arise over some grievance growing out of a misunderstanding of the terms of the existing contract and involve no proposals for changed conditions. If no settlement can be reached by the local committee or the general committee directly representing the employees on the road or roads involved, the questions in dispute are referred by the employees to their national organization, and a grand officer, as he is termed, of that organization then takes the matter up directly with the road or roads involved and endeavors by direct negotiation to effect a settlement. If this effort fails, the questions in dispute and any proposal of settlement offered by the road are usually laid before the employees concerned, and they are asked to vote upon whether they are willing to inaugurate a strike unless some basis of settlement more satisfactory to their representatives than the one offered can be secured. If the vote of the men is in favor of a strike to enforce their proposals, the grand officer again opens negotiations with the road in a further effort to effect an amicable adjustment of the controversy. If these negotiations prove fruitless, or if at the outset it is apparent that no settlement can be effected directly by the parties concerned, one or the other of the parties to the dispute makes an application to the mediators designated in the Erdman Act, requesting them to use their friendly offices to bring about an amicable adjustment of the controversy and avert the threatened strike.

When both sides have agreed to mediation proceedings they are as a rule begun very promptly, usually the only delay being that which is involved in getting the parties concerned together at the place decided upon. By reference to the date and place where the mediation proceedings have begun, and comparing these with the date the application was received, some idea may be gained of the promptness with which it has been felt necessary to take up negotiations in the majority of the cases in which the provisions of the Erdman Act have been invoked. There is no fixed rule as to where mediation proceedings shall be held. In numerous instances the representatives of the parties in controversy have come to Washington, and the negotiations have been conducted there. When this has not been feasible or desirable, one or both mediators have gone to the place in which the parties had up to that

<sup>&</sup>lt;sup>1</sup> Mediation and Arbitration of Railway Wage Disputes in the United States, by Charles P. Neill, Bulletin No. 98, U. S. Bureau of Labor.

time conducted their negotiations, and the mediation conferences have been carried on there. The mediators have covered a rather wide range of territory, having carried on conferences at points as remote from Washington as St. Paul, Denver, and El Paso.

The proceedings are purposely kept as informal as possible, in order that they may be the more readily adapted to the exigencies of any given case. Conferences are always held with the two parties to the controversy separately, and a joint meeting is never arranged until either a complete settlement of the questions in dispute or an agreement to arbitrate has been brought about by the mediators and agreed to in

writing by the two parties.

Ordinarily the mediators begin by meeting the representatives of the side by which the mediation was invoked. After learning the matters at issue and discussing these in a general way, a conference is held by the mediators with the other party to the dispute. Successive conferences are then held by the mediators with one or the other party alternately, or it may happen that several successive conferences are held with one side before again conferring with the other side. The procedure in this respect is a matter governed entirely by the nature of the questions at issue and the particular conditions existing in any given case.

No limit is set to the number of conferences which may be held nor to the period which may be devoted to the mediation proceedings. Some cases have been brought to a successful termination within a few days, but these are exceptions; from one to two weeks is more nearly the rule. In some of the large cases where conditions were peculiarly acute, and a tension existed which made it important to secure a settlement at the earliest possible moment, conferences have for days at a time been carried on throughout the entire day and far into the night; and even what were practically

all-night sessions have not been unusual.

While the procedure usually follows the above lines, any variation which seems desirable may be introduced, and the only fixed and unvarying rule is that neither side shall know what concessions the other side is willing to make unless and until an amicable agreement is reached. This rule has been adopted because both sides are more likely to make concessions if there is no danger that these concessions may later on be used to their disadvantage if the case should go to arbitration. ways possible that the mediation proceedings may prove ineffective and that the case may go to arbitration. In that event, if any concessions offered by either side were known to the other side and could be adduced before the arbitrators as offers once made, it is obvious that the side which had offered the concessions in the mediation proceedings would be to that extent at a disadvantage in arbitration proceedings. The rule above referred to prevents this difficulty and leaves both parties free to suggest concessions without fear of future prejudice. In the event of a failure to secure a settlement through mediation in any given case, neither party at the end of the proceedings would have any definite knowledge of what concessions the other had been willing to make, and both are therefore in the same relative position as they were when the proceedings began. Neither has gained any tactical advantage, nor has either had its side of the case prejudiced by what has passed during the mediation proceedings.

No minutes are taken nor are any formal records kept of what occurs in the meetings between the mediators and the respective parties to the controversy. Ordinarily the only thing which becomes a matter of formal record is the final articles of settlement

agreed to and signed by the parties in dispute.

Unless requested or authorized to do so by the parties to the controversy, the mediators do not make public the terms of settlement agreed upon through mediation.

It is true that these proceedings are carried on by Government officials under Government authority and at Government expense, and it might be argued that these facts render the controversies public matters. On the other hand, it may be held that since differences between certain classes of employers and employees engaged in interstate traffic may, if unadjusted, cause serious public inconvenience and serious public loss, the Government merely furnishes the machinery for bringing about an amicable settlement if the two parties to a controversy can not themselves come to terms; but that, nevertheless, these disagreements remain primarily the concern of the employers and employees involved. The mediators, however, are primarily concerned only with the policy that will render most effective the operations of the law, and it is believed that leaving to the parties in dispute to determine the degree of publicity to be given to the terms of settlement is much the best policy.

<sup>&</sup>lt;sup>1</sup>In this respect the treatment of mediation proceedings differs widely from that of arbitration proceedings. The latter are usually carried on in open hearings, and all the papers, including the award and a certified stenographic copy of the testimony, are filed in the clerk's office of the United States circuit court and become matters of public record.

In the event that efforts to secure an agreement through mediation prove unsuccessful, it was provided in section 2 of the law that the mediators shall attempt to have the controversy submitted to a board of arbitration for settlement.

Sections 3 to 7, inclusive, of the act specified the form of arbitration agreement that should be entered into by the parties to the controversy. The method of selecting the arbitrators was set forth, and a restricted right of appeal to the courts from the award of the arbi-

trators was granted.

The law provided that each party to the controversy select one arbitrator. Together, these two arbitrators select the third arbitrator, if they are able to agree within five days after their first meeting. In the event the third arbitrator is not named in this way within the five days, the law provided that he shall be named by the presiding judge of the Commerce Court and the Commissioner of Labor acting together.

#### THE NEWLANDS LAW.

The next step in legislation relative to mediation and arbitration was the so-called Newlands law, approved July 13, 1913. It created the offices of Commissioner of Mediation and Conciliation and Assistant Commissioner of Mediation and Conciliation, and further provided that the President shall also "designate not more than two other officials of the Government who have been appointed by and with the advice and consent of the Senate, who, together with the Commissioner of Mediation and Conciliation, shall constitute a board to be known as the United States Board of Mediation and Conciliation." In August, 1916, the board was increased to three members by the designation by the President of the Assistant Commissioner of Mediation and Conciliation as a member.

The law in general reenacted the provisions of the Erdman law relative to mediation. It also provided for three-member boards of arbitration as authorized by the Erdman Act, but, in addition, in order to meet the criticism of three-member boards placing too much power in the hands of the neutral arbitrator, it provided further for six-member boards of arbitration, composed of two representatives from each side to a controversy, and two neutral members

representing the public.

The immediate cause for the passage of the present law grew out of the demands of the conductors and trainmen, which had been presented, in a concerted movement, some months previously to 42 eastern railroads in what is known as eastern associated territory. The direct negotiations between the parties resulted in a refusal by the railroads to grant the demands of the men, on the ground that the rates of wages then prevailing were adequate and that the employees were working under favorable conditions. A strike vote had been taken, resulting in some 97 per cent of the employees voting to withdraw from the service of the railroads unless their demands were complied with. The situation was an aggravated one and reached an acute stage early in July, 1913. The public mind was excited, and the bill which had been pending in Congress for some months was, upon the advice of the President, promptly enacted into law to meet the emergency.

#### CONTROVERSIES ADJUSTED.

In the enactment of Federal legislation emphasis was placed upon arbitration as a method of settling disputes between transportation companies and their employees. Under the operation of the various laws, however, it soon became evident that mediation proceedings were to take the leading part. There were in all 48 cases settled on request of the parties either by mediation under the Erdman law or by arbitrations in accordance with its provisions. Seven of these cases were concerted movements, involving many of the various classes of employees and involving in each instance a large number of railroads, in one case as many as 64 roads. Of these 48 cases coming under the Erdman law during the 14 years of its existence 20 were settled through mediation, 8 were settled by mediation and arbitration, and 4 by arbitration alone. In the remaining 16 cases the services of the mediators, requested by one of the parties, were either refused by the other or direct settlements were reached between the parties after the services of the mediators were invoked without employing them or resorting to arbitration.

Since the Newlands law was approved, on July 15, 1913, 56 controversies have been adjusted by the Board of Mediation and Conciliation. Of this number 45 were settled by mediation and 11 by mediation and arbitration. In 20 cases employees made application to the board for its services, the railroads applied in 13 cases, and in 15 cases the railroads and their employees made joint application. In 8 cases the board proffered its services, which were accepted.

## ARBITRATION PROCEEDINGS HELD UNDER THE ERDMAN AND NEW-LANDS LAWS.

The following table sets forth in chronological order the railroad arbitration proceedings which have been held under the auspices of the Federal Government from the passage of the Erdman law to the present time. In connection with each case the date of the award is shown, together with the members of the arbitration board, the place of meetings, and the duration of the proceedings.



#### ARBITRATION PROCEEDINGS UNDER THE ERDMAN ACT, INCLUDING CASES WHERE 1898, TO

Parties to arbitr	ation.	Date of	Ar	bitrators.
Railroad company.	Employees.	agreement to arbitrate.	Name.	Occupation.
Southern Pacific (Atlantic System).	Firemen and engine- men.1	Jan. 7, 1907	W. E. Green J. R. Norton	Gen. supt. St. Louis S. W. Ry. of Tex. Attorney
Southern Pacific (Pacific System).	Telegraphers	Feb. 14, 1907	J. V. Lea. R. H. Ingram. II. B. Perham. Emory R. Johnson.	Attorney at law Gen. supt., S. Pac. Co President, O. R. T Prof. transportation and commerce, Univ. of Pa.
Georgia R. R	Firemen and engine- men.1	May 29, 1909	Hilary A. Herbert Thos. W. Hardwick. David C. Barrow	U. S. Representative
Illinois Central R. R.; Yazoo & Mississippi Valley R. R.; Indian- apolis Southern R. R.	Telegraphers	Dec. 17, 1909	Ira G. Rawn	Chancellor, Univ. of Ga President, Monon Route Vice pres., O. R. T Chm. R. R. Com. of Wisconsin.
Certain railroads lead- ing out of Chicago.3	Switchmen	Jan. 19, 1910	Carl R. Gray	Vice pres., St. L. & S. F. R. R.
Cleveland, Cincinnati, Chicago & St. Louis Ry.	Telegraphers	Jan. 29, 1910	S. E. Heberling Stephen S. Gregory Horace Baker J. J. Dermody Wm. J. Kerby	Ist vice pres., S. U. of N. A. Attorney. Gen. mgr., Q. & C. route. Vice pres., O. R. T. Prof. of sociology, Cath. Univ. of America.
Baltimore & Ohio Southwestern R. R.	do	Feb. 17, 1910	Geo. H. Groce  J. J. Dermody	Asst. to gen. mgr., Ill. Central R. R.
52 western railroads 4	Firemen and engine- men. <sup>1</sup>	Mar. 25, 1910	Wm. J. Kerby W. R. Scott Timothy Shea Wm. L. Chambers	Prof. of sociology, Cath. Univ. of America. Asst. gen. mgr., S. Pac. Co. 1st vice pres., B. L. F. & E. Lawyer, late member of Spanish Treaty Claims
Southern Ry	Telegraphers	Apr. 15, 1910	J. S. B. Thompson J. J. Dermody Wm. R. Vance	Com. Asst. to pres. of Sou. Ry Vice pres., O. R. T Dean, Geo. Washington Univ. Law School.
Missouri Pacific System.	do	May 14, 1910	Albert W. Sullivan Frank J. Ryan	Gen. mgr., Mo. Pac. Ry Com., Kansas Bd. of R. R. Commissioners.
			Wm. L. Chambers	Lawyer, latemember Spanish Treaty Claims Com.
Denver & Rio Grande R. R.	Firemen and engine- men.1	Sept. 17, 1910	W. S. Martin W. F. Hynes	Asst. gen. mgr., D. & R. G. R. R. Attorney and counsellor
	mon.		Wm. L. Chambers	at law. Lawyer, latemember Spanish Treaty Claims
Coal and Coke Ry	Engineers,	Apr. 1,1911	H. B. Spencer P. H. Morrissey	Com. Vice pres., Sou. Ry Pres., Am. R. R. Employ-
	and en- ginemen,1 conduc- tors, and		Wendell P. Stafford.	ees and Investors' Assn. Justice, Supreme Court, District of Columbia.
50 eastern railroads	trainmen. Firemen and engine- men.	Feb. 18,1913	Wm. L. Chambers	Lawyer, latemember Spanish Treaty Claims Com.
	men.		Albert Phillips Wm. W. Atterbury.	Vice pres., B. of L. F. & E. Vice pres., Pa. R. R.

<sup>&</sup>lt;sup>1</sup> The Brotherhood of Locomotive Firemen and Enginemen, while primarily an organization of firemen, also includes in its membership hostlers and a considerable number of engineers.

<sup>2</sup> The two arbitrators agreed upon a third arbitrator, but, in order to make the appointment legal (five days having elapsed), he was appointed by the chairman of the Interstate Commerce Commission and the Commissioner of Labor.

MEDIATION WAS FIRST INVOKED AND CASES OF ARBITRATION DIRECT, JUNE 1, DECEMBER 31, 1911.

Arbitrators—Continued		Hearings by	board of arbitration.		
Chosen by—	Date chosen.	Date of first hearing.	Place.	Date of award.	
Employers.	Jan. 7, 1907	Jan. 31, 1907	Houston, Tex	Feb. 1, 1907	
Employees. Chmn. I. C. C. and Com. of Labor <sup>2</sup> Employers. Employees. Chmn. I. C. C. and Com. of Labor	Feb. 14, 1907	Mar. 16, 1907	San Francisco, Cal	Apr. 6,1907	
Employers		June 21, 1909	Atlanta, Ga	June 26, 1909	
Employees. Chmn. I. C. C. and Com. of Labor <sup>2</sup> Employees. Chmn. I. C. C. and Com. of Labor	June 19, 1909 Dec. 17, 1909	Jan. 17, 1910	Chicago, Ill	Feb. 7, 1910	
Employers	_	Mar. 4, 1910	do	Mar. 22, 1910	
Employees. Chmn. I. C. C. and Com. of Labor. Employers Employees Chmn. I. C. C. and Com. of Labor.	Jan. 29, 1910	Mar. 7, 1910	Cincinnati, Ohio	Mar. 28, 1910	
Employers		Mar. 14, 1910	do	Apr. 4,1910	
Employees	do Mar. 7, 1910				
Employees Employees Chmn. I. C. C. and Com. of Labor	Mar. 25, 1910	May 16, 1910	Chicago, Ill	June 4, 1910	
Employers Employees Chm. I. C. C. and Com. of Labor	Apr. 15, 1910 do May 18, 1910	May 24, 1910	Washington, D. C	June 11, 1910	
Employers	May 14, 1910	July 6, 1910	St. Louis, Mo	July 28, 1910	
Chmn. I. C. C. and Com. of Labor					
Employers.		Oct. 11, 1910	Denver, Colo	Nov. 1,1910	
Employees					
Employers.	Apr. 8, 1911 Apr. 1, 1911	May 8, 1911	Washington, D. C	May 27, 1911	
Presiding judge Commerce Court and Com. of Labor. <sup>5</sup>	May 5, 1911				
do	Mar. 3, 1913	Mar. 10, 1913	New York	Apr. 23, 1913	
Employers Employees	Feb. 18, 1913				

<sup>For details as to roads involved, see Chapter 6.
For details as to roads involved, see Chapter 9.
The two arbitrators agreed upon a third arbitrator, but, in order to make the appointment legal (five days having elapsed), he was appointed by the presiding 'udge of the Commerce Court and the Commissioner of Labor.</sup> 

### ARBITRATIONS UNDER THE NEWLANDS ACT DURING

Parties to arbitration.	Date of	Arbitrators.	
Railroad company.	Employees.	agreement to arbitrate.	Name.
Baltimore & Ohio .  Baltimore & Ohio Southwestern .  Bessemer & Lake Erie .  Boston & Albany .  Boston & Maine .  Buffalo, Rochester & Pittsburgh .  Buffalo, Rochester & Pittsburgh .  Buffalo & Susquehanna .  Central New England .  Central Railroad of New Jersey .  Chicago, Indiana & Southern .  Chicago, Terre Haute & Southeastern .  Cincinnati, Hamilton & Dayton .  Cincinnati Northern .  Cieveland, Cincinnati, Chicago & St. Louis .  Dayton & Umon .  Delaware & Hudson .  Delaware & Hudson .  Delaware & Hudson .  Delaware & Hudson .  Delaware & Hidson .  Lake Erie & Western .  Lake Shore & Michigan .  Lake Erie & Western .  Lehigh & Hudson River .  Long Island .  Maine Central .  New York Chicago & St. Louis .  New York Chicago & St. Louis .  New York New Haven & Hartford .  New York , New Haven & Hartford .  New York , Nontario & Western .  New York , Nontario & Western .  New York , Philadelphia & Norfolk .  Pennsylvania Lines , East .  Pennsylvania Lines , West .  Philadelphia & Reading .  Rulland .  Vandalha .  Western Maryland .  Western Maryland .  Western Maryland .  Western Maryland .	ConductorsTrainmen.	}July 26,1913	(W. W. Atterbury
Chicago & Western Indiana Belt Railway Co. of Chicago	Engineers Firemen Trainmen	Aug. 6, 1913	W. J. Jackson E. S. Huston
Chicago, Burlington & Quincy	{Conductors {Trainmen	}Aug. 27,1913	E. R. Curtis  E. L. Harrigan  Fairfax Harrison 1  P. H. Morrissey  Gerrit J. Diekema  Henry S. Boutell
Wheeling & Lake Erie. Wabash-Pittsburgh Terminal West Side Belt Ry.	Telegraphers Telephoners Station agents Signalmen	Nov. 7,1913	D. R. Webner
Southern Railway	{Maintenance of way employees.	Nov. 3, 1913	T. H. Gerry

 $<sup>^1\</sup>mathrm{On}\,\mathrm{Dec}$ . 2, 1913, Pierce Butler, lawyer, was appointed arbitrator in place of Fairfax Harrison, resigned.

THE FISCAL YEARS ENDED JUNE 30, 1914 AND 1915.

Arbitrator	s-Continued.	Hearing by be	Date of			
Occupation.	('hosen by.	Date chosen.	Date of first hearing.	Place.	award.	
Vice pres. Pennsylvania R. R. Vice pres. New York Central Lines. Vice pres. Order of Railway Conductors. Editor and publisher Railroad Trainman. President College of the City of New York. President National Civic Federation.	tors.	Aug. 19,1913 Aug. 25,1913 Sept. 1,1913	Sept. 11, 1913	New York, N. Y.	Nov. 10, 1913	
Asst. grand chief, Brotherhood of Loco- motive Engineers. Gen. mgr., Chicago & Eastern Illinois K. R. Lawyer.  Vice pres. Order of Rail- way Conductors. Gen. chmn. grievance committee, N. P. R. R. Pres. Chicago, Indian- apolis & Louisville Ry. Asst. to vice pres. C. B. & Q. R. R. Lawyer	Employees  Roads  U.S. Board of M. and C. Employees do  Road do	Aug. 11,1913 Aug. 22,1913 Aug. 27,1913do Sept. 1,1913do Oct. 29,1913	Nov. 3,1913	Chicago, Illdodo		
Lake Erie Ry. Lawyer do Int. pres. Commercial Telegraphers' Union of America. Lawyer do Eng. of maint. of way		Nov. 18, 1913 do	Dec. 29, 1913	Cleveland, Ohio.	Jan. 13,191	
Southern Ry. Gen. chmn., maint. of way employees. Lawyer	Employees	Nov. 10, 1913	Nov. 17, 1913	Washington, D. C.	Dec. 17,191	

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## ARBITRATIONS UNDER THE NEWLANDS ACT DURING

Parties to arbitration.	Date of	Arbitrators.		
Railroad company.	Employees.	agreement to arbitrate.	Name.	
New York, Chicago, & St. Louis	Telegraphers Station agents Signalmen	Feb. 5, 1914	Julian W. Mack. D. G. Ramsay.	
Georgia & Florida	{Engineers {Firemen	Mar. 21,1914	L. S. Davis	
Ninety-eight western railroads	{Engineers {Firemen	}Aug. 3,1914	(F. A. Burgess T. Shea. H. E. Byram W. L. Park Jeter C. Pritchard. Charles Nagel	

THE FISCAL YEARS ENDED JUNE 30, 1914 AND 1915—Continued.

Arbitrato	rs—Continued.	Hearing by b	Date of		
Occupation.	Chosen by.	Date chosen.	Date of first hearing.	Place.	award.
Gen. supt. Chicago Great Western Ry. U. S. circuit judge Lawyer. Gen. chmn. Brother- hood of Locomotive	Road U. S. Board of M. and C. Employeesdo	Feb. 14,1914 May 15,1914 May 23,1914 Mar. 21,1914	May 25,1914	Chicago, Ill	June 13,1914
Engineers. Gen. mgr. Charleston & Western Carolina Ry. Judge U. S. Court of Claims (retired). Asst. grand chief Brother- hood of Locomotive Engineers. Asst. pres. Brotherhood	Road U. S. Board of M. and C. Employees	Mar. 23,1914 Apr. 20,1914 Aug. 10,1914	Apr. 28,1914	Augusta, Ga	May 9,1914
Asst. pies. Brothermood of Locomotive Firemen and Enginemen. Vice. pres. C. B. & Q. R. R. Vice. pres. Ill. Cen. R. R. U. S. circuit judge.	Roads do U.S. Board of	do Nov. 21,1914	Nov. 30, 1914	Chicago, Ill	Apr. 30,1915

### SOUTHERN PACIFIC CO. (ATLANTIC SYSTEM) AND BROTHER-HOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN: 1907.

(Arbitration between the Southern Pacific Co., Atlantic System, embracing the following railroads: The Galveston, Harrisburg & San Antonio Railway Co., The Texas & New Orleans Railroad Co., The Louisiana Western Railroad Co., Morgan's Louisiana & Texas Railroad & Steamship Co., and the Iberia & Vermillion Railroad Co., and the Brotherhood of Locomotive Firemen and Enginemen.)

The board of arbitration selected for the adjustment of the contro-

versy under review was composed as follows:

J. V. Lea, lawyer, appointed by the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor. W. E. Green, general superintendent St. Louis Southwestern Railway of Texas, selected by the railroads.

J. B. Norton, lawyer, selected by the Brotherhood of Locomotive Firemen and Enginemen.

#### CONTROVERSY.

The matter submitted to arbitration involved conflicting claims of the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen and Enginemen respecting seniority rights of switch engineers employed on the Sunset Central lines of the Southern Pacific Co., and presented an issue in which the Southern Pacific Co. professed to have but an indirect interest. Stated briefly, an agreement between the engineers and the railroad entered into in 1903 stipulated in part that road engineers laid off through slack business might displace switch engineers if such road engineers were older in In May, 1904, the firemen secured a letter from W. G. Van Vleck, the general manager of the Texas lines of the Southern Pacific Co., agreeing that road engineers could only displace switch engineers when older in combined service as fireman and engineer. In May, 1906, the contract between the railroad company and the engineers was reopened and the clause concerning displacement of switch engineers rewritten so as to provide that age in service as an engineer should alone be taken into account. On the part of the firemen it was contended that the ruling contained in the letter of the general manager constituted an amendment to their contract with the company and could not be abrogated without 30 days notice. The railroad company, while denying that the letter in question constituted an amendment to the firemen's contract, agreed to accept any settlement which might be agreed upon between the two organizations.

As submitted to arbitration by agreement entered into on January 7, 1907, the issues presented to the board of arbitration were as

(a) Did the letter of W. G. Van Vleck, addressed to C. W. Maier, dated May 26, 1904, constitute an amendment to the agreement entered into between the first parties and the Brotherhood of Locomotive Firemen and Enginemen, effective April 1,

<sup>(</sup>b) Should it be decided that the said letter of May 26, 1904, did not constitute an amendment to the said agreement of April 1, 1903, and therefore not binding on the first parties, or any of them, then all matters now in controversy between the parties hereto shall be considered closed and finally disposed of and shall not again be reopened?

(c) Should it be decided that the said letter of May 26, 1904, constituted an amendment to the said agreement of April 1, 1903, then the arbitrators shall decide the further questions as follows:

(1) Upon what company or companies did the said letter become thus binding?(2) Upon what date did the said letter become thus binding?

(3) During what period did the said letter remain thus binding?

(d) It is hereby stipulated and agreed between the parties hereto, in advance of

arbitration provided for by these presents, that whatever binding effect, if any, the arbitrators may decide attached to said letter of May 26, 1904, such binding effect

was absolutely terminated on May 1, 1906.

(c) It is further agreed between the parties hereto that if the said board of arbitration shall decide that said letter of May 26, 1904, ever constituted an amendment to the said agreement of April 1, 1903, the said board shall determine what, if any, pecuniary loss or damage any employee claiming under the said agreement of April 1, 1903, has sustained by reason of the termination on May 1, 1906, of the said amendment, if any Provided, however, That no decision which the said board of arbitration may render shall in any wise, or to any extent, contravene any of the provisions of the agreement between the parties of the first part, and the Brotherhood of Locomotive Engineers. effective February 1, 1903. or any provision of the supplement to the said agreement effective May 1, 1906: And provided further, That no fireman who shall be, or who has been promoted to the position of switch or road engineer shall be entitled to any seniority for any period spent in the service of the parties of the first part, or any of them, as fireman: And provided further. That upon the payment by the first parties to the employee or employees, if any, whom the said board may by their decision find have swered pecuniary loss or damage of the amount of such loss or damage as may be fixed by the board, then all matters now in controversy between the parties hereto hall be considered closed and finally disposed of, and shall not again be reopened.

#### FINDINGS OF THE BOARD OF ARBITRATION.

Hearings before the board of arbitration continued from its organization on January 31, 1907, until the afternoon of the day following, when the arbitration was concluded upon the presentation to the board of a settlement agreed to in writing by the parties to the controversy. This agreement was unanimously adopted and announced as the award of the board of arbitration, and as set forth in the official record was as follows:

(a) That the ruling contained in the letter of W. G. Van Vleck to C. W. Maier, dated May 26, 1904, constituted an amendment to the agreement entered into between the Texas & New Orleans Railroad Co. and the Galveston, Harrisburg & San Antonio Railway Co., and the Brotherhood of Locomotive Firemen, effective April 1, 1903, but did not constitute an amendment binding upon the other companies parties to the said agreement, or parties to this arbitration agreement. This finding shall be a determination only of the effect of the letter of May 26, 1904.

(b) The said letter became binding on the Texas & New Orleans Railroad Co. and

the Galveston, Harrisburg & San Antonio Railway Co. May 26, 1904, and remained in full force and effect until May 1, 1906, but the Brotherhood of Locomotive Firemen in

good faith considered the said letter in force and effect until January 7, 1907.

(c) There being no evidence before this board that any employee of the Texas & New Orleans Railroad Co. and the Galveston, Harrisburg & San Antonio Railway Co., claiming under the said agreement of April 1, 1903, or the amendment thereto of May 26, 1904, has suffered any pecuniary loss or damage by reason of the termination of the said amendment to the said agreement, this board finds that no pecuniary loss or damage has been sustained by any employee claiming under the said agreement or amendment thereto, and that all matters of every nature whatsoever in controversy on January 7, 1907, or prior thereto, between the parties to this arbitration agreement, have been and they are fully and finally disposed of and shall not again be reopened under any existing contracts.

#### APPLICATION OF AWARD.

The following table shows, by classes of engines and branches of service, the rates in effect before and after the arbitration award, and the amount and per cent of increases granted by the arbitration board: Rates paid to locomotive firemen before and after the arbitration of 1907 and amount and per cent of increase in rates awarded by the arbitration board according to class of engines.

	Number.		Number. Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Increase.	
	1906	1908	1906	1908	1906	1908	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, OOO>: Coal. Oil.	13 106	11 141	64 64	59 59				
Switching (11 consecutive hours)— First year. Second year.					\$1.50			
After					1.75 2.00			
After First-class yards. Second-class yards.					2.00 2.00	\$2.25 2.15	\$0.25 .15	12. 8 7. 5
Class B3, OOOo>: Coal	18 77	2	56	61				
Oil. Passenger— 110,000 to 140,000 pounds on	- 11	105	56	61				
drivers— Valley Mountain					2. 25 2. 84			
Over 140,000 pounds on drivers— Valley					2.35	2, 50	. 15	
Mountain					2. 97	3. 12	.15	6. 4 5. 1
Mountain. Between Rocklin and Truckee. Cylinders 18 inches and over—					3.75			
Valley						2. 25 2. 98		
Class B4, OOOOo>: Coal	19	41	90	91				
Oil	188	266	90	91				
Valley						2. 25 2. 98		
Vallev					2. 25			·
Mountain					2.84			
Over 140,000 pounds on drivers— Valley . Mountain . Between Rocklin and Truckee .					. 2.35 2.97	$2.50 \\ 3.12$		6. 4 5. 1
Class C2, OOoo>:					3.75	• • • • • • •		
Coal Oil Passenger—	22 177	185	28 28	29 29				
Cylinders 18 inches and over— Valley						2. 25		
Mountain			•••••	•••••	• • • • • • •	2.98		
Valley Mountain					2. 25 2. 84			
Valley					2.35 2.97	2.50 3.12	.15 .15	6.4
Mountain. Between Rocklin and Truckee Class C 3, OOOoo>:					3. 75	3. 12	.10	5. 1
Coal Oil.	49 188	23 244	44 44	50 50				
Passenger— Cylinders 18 inches and over—						2. 25		
Valley  Mountain 110,000 to 140,000 pounds on						2. 98		
drivers— Valley Mountain					2. 25 2. 84			
Over 140,000 pounds on drivers— Valley					2.35	2. 50	. 15	6, 4

Rates paid to locomotive firemen before and after the arbitration of 1907 and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued.

	Number.		weig	rage ht on vers ns).	100 mil	or day of es or 10 or less.	Incr	ease.
	1906	1908	1906	1908	1906	1908	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd.								
Class C4, 000000>:	1	1	64	65				
Coal Oil. Passenger—		16	64	65				
Cylinders 18 inches and over— Valley. Mountain 110,000 to 140,000 pounds on						\$2.25 2.98		
110,000 to 140,000 pounds on drivers — Valley					\$2.25			
Valley.  Mountain  Over 140,000 pounds on drivers—					2.84			
					2.35 2.97	2.50 3.12		5.1
Mountain Between Rocklin and Truckee Class D2, 000> (oil). Passenger Class E3, 0000> (oil).	2	2	14	14	3.75 2.25	2. 25	.00	
				40				
Oakland. Portland.					2.50 2.50	2.75 2.75	. 25	10.0 10.0
Cylinders under 18 inches— Oakland Portland					2.50 2.50	2.75 2.75	. 25	10.0 10.0
Class F2, oOOoo>:		7		53				
Oil		34		53				
Valley Mountain Over 140,000 pounds on drivers—						2. 25 2. 98		
Valley						2.50 3.12		
Class F3, 0OOOoo>: Coal Oil		1	70	71		0.12		
Passenger—				71				
Valley Mountain Between Rocklin and Truckee					2.35 2.97	2.50 3.12 3.90	.15 .15	6. 4 5. 1
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class B3, 000o>:	57	51	73	73				
Oil Freight— Less than 110,000 pounds on	25	15	73 73	73				
drivers— Valley					2. 46			
Mountain					2.82			
Valley					2.69 2.96	2. 69 2. 96	.00	.0
					2.96 2.82	3. 21 2. 82	.25	8.4
Mountain, 8 miles per hour Mountain, 10 miles per hour					3. 10 3. 10	3. 10 3. 35	.00	8.1
Between Rocklin (1906), Roseville (1908), and Truckee.					3.75	3.90	.15	4.0

Rates paid to locomotive firemen before and after the arbitration of 1907 and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued.

	Number.		Average weight on drivers of (tons).  Rate per day of 100 miles or 10 hours or less.		Incr	ease.		
	1906	1908	1906	1908	1906	1908	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMO- TIVES—continued.								
Class B4, OOOOo>: Oil. Freight— Less than 110,000 pounds on	7		90					
drivers— Valley					\$2.46 2.82			
110,000 to 140,000 pounds on drivers— Valley					2. 69			
drivers— Valley Mountain. Over 140,000 pounds on drivers— Valley Mountain. Between Rocklin and Truckee. Class C 3. 000000 >:					2. 96			
Mountain Between Rocklin and Truckee Class C 3, 00000>:			1					
Coal	5		71	71				
drivers— Valley Mountain 110,000 to 140,000 pounds on					2.46 2.82			
drivers—		1			2.69 2.96	\$2.69 2.96	<b>\$0</b> .00	0.0
Valley						3. 21 2. 82	.00	8.4
Valley Mountain, 8 miles per hour Mountain, 10 miles per hour Between Rocklin and Truckee					3. 10 3. 10 3. 75	3. 10 3. 35 4. 00	.00 .25 .25	.0 8.1 6.7
Class F2, 00000>:	9		53	53 53				
Cylinders 18 inches and over— Valley. Mountain 110,000 to 140,000 pounds on						2. 25 2. 98		
110,000 to 140,000 pounds on drivers— Valley					2. 25			
drivers— Valley . Mountain <b>Ove</b> r 140,000 pounds on drivers— Valley . Mountain Between Rocklin and Trucked					2. 84 2. 35 2. 97	2. 50 3. 12	. 15	6. 4
Between Rocklin and Truckee					2.01	3, 90		0.1
Class B4, OOOOo>:								
Oil	1	23	87	87				
drivers— Valley. Mountain, 8 miles per hour. Mountain, 10 miles per hour. Mountain, 10 miles per hour.					2. 69 2. 96 2. 96	2. 69 2. 96 3. 21	.00	.0 .0 8.4
						2. 82 3. 10	.00	.0
Valley. Mountain, 8 miles per hour. Mountain, 10 miles per hour. Between Rocklin and Truckee					3. 10 3. 75	3. 35 3. 75	.25	8.1

Rates paid to locomotive firemen before and after the arbitration of 1907 and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued.

	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		_ Increase.	
	1906	1908	1906	1908	1906	1908	Amount.	Per cent.
TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LOCOMOTIVES—continued.  Class C 3, OOOooo>: Oil	8	4	50	50	\$2,69	\$2.69	\$0.00	0.0
Mountain, 8 miles per hour Mountain, 10 miles per hour Over 140,000 pounds on drivers— Valley Mountain, 8 miles per hour						2, 96 3, 21 2, 82 3, 10	.00 .25	.0 8.4 .0
Mountain, 10 miles per nour Between Rocklinand Truckee Class C4, OOOOoo>: Oil				65	3. 10 3. 75	3, 35 3, 75	.25	8.1
Freight—  110,000 to 140,000 pounds on drivers— Valley.  Mountain, 8 miles per hour  Mountain, 10 miles per hour  Over 140,000 pounds on drivers— Valley.  Mountain, 8 miles per hour  Mountain, 10 miles per hour.  Between Rocklinand Truckee					2. 69 2. 96 2. 96 2. 82 3. 10 3. 10 3. 75	2. 69 2. 96 3. 21 2. 82 3. 10 3. 35 3. 75	.00 .00 .25 .00 .00 .25 .00	.0 8.4 .0 .0 8.1

## SOUTHERN PACIFIC CO. (PACIFIC SYSTEM) AND ORDER OF RAILROAD TELEGRAPHERS: 1907.

(Arbitration between the Southern Pacific Co., Pacific system; lines east of Sparks and lines in Oregon, and the Order of Railroad Telegraphers.)

By agreement dated February 14, 1907, the requests of telegraphers employed on the Pacific system of the Southern Pacific Co. for improvements in working conditions and higher rates of pay were submitted to arbitration under the terms of the so-called Erdman Act, the proceedings involving about 1,250 employees who were represented in the arbitration proceedings by officials of the Order of Railroad Telegraphers. The arbitration board selected to hear the case was composed as follows:

Emory R. Johnson, professor transportation and commerce, University of Pennsylvania, appointed by the chairman of the Interstate Commerce Commission and the United States Commissioner of

Labor.

R. H. Ingram, general superintendent Southern Pacific Co., selected by employer.

H. B. Perham, president Order of Railroad Telegraphers, selected

by employees.

The board was organized with Prof. Johnson as chairman, and held its first hearing March 16, 1907. The arbitration award was announced April 6 following.

#### DEMANDS OF EMPLOYEES.

As set forth in the arbitration agreement, the stipulations respecting changes in working conditions and rates of pay, as submitted to arbitration, were as follows:

(a) Whether members of the Order of Railroad Telegraphers in the employ of the employer shall legislate for their train dispatchers

respecting rates of pay, hours of service, or otherwise.

(b) The question of a reduction in hours of service on Sundays for

employees to five hours.

(c) The question of percentage of general increase in salaries of

employees.

(d) The question of eliminating from the operation of the schedule certain important agencies where the duties of soliciting traffic are paramount.

#### FINDINGS OF THE BOARD OF ARBITRATION.

The testimony presented to the board of arbitration included, in addition to a large volume of exhibits filed with the board, oral statements and depositions covering a total of 1,500 typewritten pages in the official record of the proceedings. Upon the conclusion of

the hearings and after consideration of the testimony, exhibits, etc., the board announced its award as follows:

(a) That the members of the Order of Railroad Telegraphers in the employ of the employer shall not legislate for train dispatchers regarding rates of pay, hours of service, or otherwise. Concurring, R. H. Ingram and Emory R. Johnson; dissenting, H. B. Perham.

(b) That the regular hours of service on Sunday shall be one-half the regular hours of labor on other days, provided that at any station where it is impracticable or inconvenient for the employer to arrange the service so as to reduce Sunday labor to one-half time, he may arrange to give the employee leave of absence on full pay for 26 days per annum at such time or times as will cause the employer and the public the least inconvenience. Concurring, H. B. Perham and Emory R. Johnson; dissenting, R. H. Ingram.

(c) That the percentage of general increase in salaries of employees shall be  $7\frac{1}{2}$  per cent; and that the apportionment of this general increase among division and subdivisions of the employer's lines shall be such as may be mutually agreed upon by the employer and the Order of Railroad Telegraphers. Concurring, H. B. Perham and

Emory R. Johnson; dissenting, R. H. Ingram.

(d) That the appointment of station agents whose regular duties do not include telegraphic work and whose annual earnings in the form of salaries and commissions equal or exceed \$1,300 shall not be controlled by the schedule or agreement between the employer and the Order of Railroad Telegraphers. Concurring, R. H. Ingram and Emory R. Johnson; dissenting, H. B. Perham.

#### EXCEPTIONS TO THE ARBITRATION AWARD.

As a result of the findings of the board of arbitration with respect to the issues involved in articles (a) and (d) of the stipulations submitted to arbitration the employees involved in the controversy availed themselves of the provisions of section 4 of the act under which the arbitration was held, which provided for an appeal to the courts from the decision of the arbitrators. This section provided that the award, papers, and proceedings, including the testimony relating thereto, certified by the arbitrators should be filed in the clerk's office of the circuit court of the United States for the district wherein the controversy arose or the arbitration was entered into and should be final and conclusive upon both parties, unless set aside for error of law apparent in the record. After the filing of the award the parties were given 10 days within which to file exceptions thereto preparatory to an appeal. The right of appeal under the Erdman Act was first to the circuit court of the United States and after a decision of the eircuit court, either party had a further right of appeal to the circuit court of appeals.

In pursuance of the provisions of section 4 of the act exceptions to the award made in response to issues (a) and (d) were filed in the United States Circuit Court of the Northern District of California by the employees on April 17, 1907. With respect to these issues it was alleged that the award was contrary to law and not supported by the evidence, and that the board erred in admitting evidence pertaining to matters outside of and not responsive to the questions submitted to arbitration. It was further alleged with respect to

clause (d) that the board attempted to decide questions which were never submitted to arbitration. Subsequently, the employees, on April 22, filed a notice that they would apply for entry of judgment on the awards made on the respective questions submitted to arbi-

tration under articles (b) and (c).

In a decision rendered August 12, 1907, the court sustained the award of the board of arbitration as to clause (a), and sustained the exceptions filed by the employees as to the findings of the board with respect to clause (d), this finding being nugatory and not binding upon either party. In overruling the motion for entry of judgment under clauses (b) and (c) the court stated that it was doubtful whether under the general rules applicable in such cases the issue submitted were not so interdependent that they must all stand or fall together, and held that until the final disposition of the case no part of the award became effective.

The action of the district court with respect to the exceptions filed by the employees was followed by a further appeal by the railroad company from the court's decision to the circuit court of appeals. On June 1, 1908, no hearing on the second appeal having been reached in the meantime, the parties to the controversy, as a result of negotiations with one another reached an agreement by which the litigation in court was abandoned and the controversy finally settled.

Under this agreement the issue involved in clause (d) was settled by excluding from the operation of the schedule or agreement such positions of station agent as had been excluded under the arrangement in force prior to the arbitration. Application of the wage increase of  $7\frac{1}{2}$  per cent was made on a flat percentage basis, the two parties being unable to agree on any other basis of distribution. With the exception of the modifications agreed to in the case of clause (d), the issues involved were thus adjusted substantially in accordance with the award rendered by the board of arbitration.

#### CONCLUSIONS.

From the foregoing review it is seen that the employees, as a result of the arbitration, secured, in addition to an increase of 7½ per cent in rates of pay, the adoption of a rule providing for a reduction of the hours of service on Sunday to one-half the regular hours obtaining on week days, or in lieu thereof an allowance of 26 days annual leave

of absence with pay.

The issue involved in article (a), respecting the question as to whether or not telegraphers should legislate for train dispatchers with respect to conditions of employment was decided adversely to the contention of the employees, and a basis of settlement agreed to with respect to the question of eliminating certain agencies from the operation of the agreement between the telegraphers and the railroad, which was apparently acceptable to both sides.

# GEORGIA RAILROAD AND BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN: 1909.

(Result of arbitration between the Georgia Railroad and its terminals and the Brotherhood of Locomotive Firemen and Enginemen.)

The arbitration proceedings described below involved on the one hand the Georgia Railroad, a corporation operating approximately 300 miles of railroad, with terminals in the city of Atlanta, and on the other about 80 employees of the company, including firemen, enginemen, and hostiers. Arbitration proceedings followed unsuccessful efforts of Federal officials to adjust by mediation a disagreement between the railroad and the employees over a series of regulations proposed by the latter, governing conditions of employment. Stipulations for arbitration were agreed to May 29, 1909, the arbitrators being as follows:

David C. Barrow, chancellor University of Georgia, appointed by the chairman of the Interstate Commerce Commission and the United

States Commissioner of Labor.

Hilary A. Herbert, attorney, selected by the railroad company. Thomas W. Hardwick, Member of Congress, selected by employees.

#### DEMANDS OF THE EMPLOYEES.

The regulations proposed by the employees, and submitted to arbitration, were embraced in a series of six articles designated by the letters of the alphabet (a) to (f), inclusive. Of these requests, articles (a), (c), and (e) embodied the paramount issues of the controversy, article (a) stipulating that the Georgia Railroad should not use negroes as locomotive firemen, nor as hostlers nor assistant hostlers, article (c) stipulating that all firemen when hired should be placed in freight yard or hostling service, the senior white firemen to have preference of engines and runs; and article (e), that passenger, through, local freight, and yard engines should not be blocked by nonpromotable men.

Article (b) contained proposed rules governing promotion and the class of service in which firemen should be placed when hired, and article (f), the stipulation that firemen should not be required to throw switches, flag street crossings or trains except in cases of emergency. No change in the wage scale was proposed other than as involved in article (d), which stipulated that hostlers should receive their existing rates of pay, assistant hostlers to be considered as yard firemen and paid yard firemen's rates; extra firemen when used

as hostlers to receive the rate paid to hostlers.

# FINDINGS OF THE BOARD OF ARBITRATION.

The hearings of the board of arbitration were conducted at Atlanta, Ga., beginning June 21, 1909, and ending June 26, when the board announced its award.

With respect to the request for the exclusion of negroes from employment in the occupations specified, the board awarded that negroes when employed in such positions should be paid the same wages as white men in similar positions. The award in response to this issue was concurred in by Arbitrators Herbert and Barrow, Arbitrator Hardwick dissenting in the following statement:

In so far as the above finding permits the continued employment of negro firemen by the Georgia Railroad, I dissent therefrom, because I believe from the evidence that such employment is a menace to the safety of the traveling public. In so far as such finding requires that when negroes are so employed, they shall receive the wages equal to those paid to white men, I concur therein, believing that such requirement, by removing the principal incentive for their employment, will result in the speedy elimination of this cheaper labor, and a consequent improvement of the service.

The regulations requested by the employees in article (d) were awarded by the board, and the proposals contained in articles (c) and (f) disallowed, Arbitrator Hardwick dissenting from the decision of the board with respect to article (c). With modifications in certain details, the employees were also awarded the rules requested in

articles (b) and (e).

The award of the board of arbitration as compared with the requests of the employees is shown below in detail, the articles of the requests and the awards being shown in parallel columns. With the exception of changes in the rules governing seniority and promotions, no material modifications of the working conditions in effect on the railroad before the award were involved in the various findings of the board.

#### ARTICLE A.

REQUESTS OF THE LOCOMOTIVE FIREMEN, ENGINEMEN, AND HOSTLERS.

AWARD OF THE BOARD OF ARBITRATION.

That the Georgia Railroad Co. and its terminals at Atlanta will not use negroes as locomotive firemen on the road or in the yards, nor as hostlers nor assistant hostlers.

The Georgia Railroad, when using negroes as locomotive firemen on the road or in the yards, or as hostlers, or as hostlers' helpers, shall pay them the same wages as white men in similar positions.

#### ARTICLE B.

That firemen shall have three years' experience before being promoted to the position of engineer, and shall be promoted in the order of their seniority, provided they are able to pass all reasonable examinations. If they refuse or fail to pass the first examination, they will be reduced to freight service without losing their seniority, and the next senior man in turn will be called on to pass. Failing on second examination, they will be reduced to bottom of extra list or disposed of as the company desires. White firemen now in the service who are physically incapacitated for service will not be subject to this rule. When firemen are promoted to the position of engineer, they shall be given certificate of promotion signed by the examiner.

Firemen in the line of promotion to the position of engineer shall have three years experience before being promoted to the position of engineer, and shall be promoted in the order of their seniority, provided they are able to pass all reasonable requirements and examinations. they refuse or fail to pass the first examination, they will be reduced to freight service without losing their seniority, and the next senior man in turn will be called on to pass. Failing on the second examination, they will be reduced to bottom of extra list, or disposed of as the company desires. Firemen now in the service who are physically incapacitated for service will not be subject to this rule. When firemen are promoted to the position of engineer, they shall be given certificate of promotion, signed by the examiner.

#### ARTICLE C.

That all firemen when hired shall be placed in freight, yard, or hostling service, and the senior white firemen shall have preference of engines and runs.

We find against the proposition embraced in submission (c).

#### ARTICLE D.

That all hostlers shall receive their present rate of pay; assistant hostlers shall be considered as yard firemen, and paid yard firemen's rates; extra firemen, when used as hostlers, shall receive the rate paid to hostlers.

That all hostlers shall receive their present rate of pay; assistant hostlers shall be considered as yard firemen, and paid yard firemen's rates; extra firemen, when used as hostlers, shall receive the rate paid to hostlers.

#### ARTICLE E.

That passenger, through, local freight, and yard engines will not be blocked by nonpromotable men.

We find for the proposition embraced in submission (e) in the following form: In assigning vacancies to firemen, seniority alone shall not control, though it may be considered in connection with the efficiency, and with the necessity where it exists of giving experience to candidates for promotion to the position of engineer.

#### ARTICLE F.

That firemen will not be required to throw switches, flag street crossings or trains, except in cases of emergency. We find against the proposition embraced in submission (f).

# ILLINOIS CENTRAL RAILROAD, YAZOO & MISSISSIPPI VALLEY RAILROAD, AND INDIANAPOLIS SOUTHERN RAILROAD AND ORDER OF RAILROAD TELEGRAPHERS: 1909.

(Arbitration between the Illinois Central Railroad Co., the Yazoo & Mississippi Valley Railroad Co., and the Indianapolis Southern Railroad Co. and the Order of Railroad Telegraphers.)

A controversy which arose in 1909 between the Illinois Central Railroad and its subsidiaries, referred to above, and the Order of Railroad Telegraphers, respecting rates of pay and working conditions of members of this order in the service of the railroads, was, by agreement in writing dated September 17, 1909, submitted to arbitration under the terms of the Erdman Act. Approximately 1,400 employees, including those exclusively engaged in telegraph service, as well as telegraphers who also performed the duties of station agent, etc., were embraced in this movement. The board of arbitration selected to hear the case was composed as follows:

B. H. Meyer, chairman of the Railroad Commission of Wisconsin, appointed by the chairman of the Interstate Commerce Commission

and the United States Commissioner of Labor.

Ira G. Rawn, president of the Monon Route, selected by the Illinois Central Railroad Co.

John A. Newman, vice president Order of Railroad Telegraphers,

selected by the employees.

The board of arbitration was organized with Mr. Meyer as chairman and conducted hearings in the Federal building at Chicago from January 17 to January 21, 1910, inclusive. The arbitration award was announced February 7, 1910.

#### DEMANDS OF EMPLOYEES.

The proposals of the employees for changes in working conditions and rates of pay were embodied in a series of articles designated by the numbers 1 to 5, inclusive. Article 1 related to the basis of a day's work, article 2 to the rate of compensation to be allowed for overtime work, article 3 to the allowance of extra compensation for certain special services, and article 4 to compensation and conditions to obtain in connection with work performed on Sunday. In article 5 the employees requested that an increase in wages be granted equal in amount to 10 per cent of the existing rates.

In paragraphs (a), (b), and (c) of article 1 the employees proposed that at offices where but one telegrapher, two telegraphers, or one day and one night telegrapher, respectively, were employed, 10 consecutive hours, including meal hour, should constitute a day's work. Paragraphs (d) and (e) proposed that in offices where three telegraphers or more than three telegraphers, respectively, were employed, 8 consecutive hours should constitute a day's work, paragraph (e) also to apply to telegraphers in dispatching offices. In

paragraph (f) the employees stipulated that 7 hours should constitute a day's work for telegraphers working a split trick, no trick to

be split more than once.

In paragraph (q) of this article it was requested that telegraphers, except those working 8 hours or less, be allowed 1 hour for meals between 11.30 and 2, day or night, and in case of the meal hour being curtailed on account of wire work or meeting or blocking trains, that 1 hour overtime be allowed, and if regular meal hour is missed, an allowance of 30 minutes for lunch at the first opportunity.

Paragraph (a) of article 2 proposed an overtime rate of 35 cents and 45 cents per hour, respectively, in certain specified groups of offices. Paragraph (b) proposed an allowance of 35 cents for meeting trains within 1 hour after the expiration of regular hours, such employee to remain on duty 1 hour if necessary, and if detained more

than I hour to receive overtime thereafter.

In paragraph (a) of article 3 the employees requested an increase from \$7.50 to \$10 per month in the allowance for operating gasoline pumps; paragraph (b) stipulated that telegraphers at stations where section men resided should be relieved of the duty of attending switch or fixed signal lights, except train-order signals; and paragraph (c) an allowance of 50 cents per light per month for attending such lights at stations where such service was required of telegraphers.

Article 4 requested that telegraphers, except those working 8 hours or less, required to work Sunday, be paid overtime at overtime rates for such service, telegraphers working 8 hours or less to be excused from Sunday and holiday duty, where practicable, without reduc-

tion of pay.

#### FINDINGS OF THE BOARD OF ARBITRATION.

In response to the issues involved in articles 1 to 4, inclusive, of the requests of the employees, the board of arbitration in its award ordered changes in the preexisting rules governing working conditions and compensation for work performed after the expiration of the regular hours of service which involved, as estimated by the board, an increase in the annual wage payments of the company to its telegraphers of \$50,000. The award in detail in response to these issues was as follows:

#### ARTICLE 1.

Eight consecutive hours shall constitute a day's work for telegraphers in (X) office, Chicago; (MN) office, Mounds; (BD) office, New Orleans; and (GO) office, Memphis. The regular overtime rate at the above offices 45 cents per hour.

#### ARTICLE 2.

Nine consecutive hours of service shall constitute a day's work for telegraphers employed at the following branch offices: (K) office, Cherokee, Iowa; (GD) office, Fort Dodge, Iowa; (KB) office, Dubuque, Iowa; (DR) office, Freeport, Ill.; (CO) office, Clinton, Ill.; (HU) office, Kankakee, Ill.; (Z) office, Mattoon, Ill.; (HA) office, Champaign, Ill.; (CD) office, Carbondale, Ill.; (FU) office, Fulton, Ky.; (DS) office, Princeton, Ky.; (UD) office, Louisville, Ky.; (JO) office, Jackson, Tenn.; (CD) office, Water Valley, Miss.; (MC) office, McComb, Miss.; (CR) office, Corinth, Miss.; (DS) office, Memphis, Tenn.; (DE) office, Greenville, Miss.; (DOD) office, Wilson, La.; (CD) office, Indianapolis, Ind.

The above enumeration shall not prevent the employer and employees from agreeing upon a designation of dispatchers' offices different from the above list.

ing upon a designation of dispatchers' offices different from the above list.

#### ARTICLE 3.

Telegraphers working 10 hours or more will be given 15 days leave of absence annually without loss of pay. Leave of absence shall be granted at such time or times as may be mutually agreed upon between employees and employer. If in any year, for sufficient reasons, an employee does not receive the full leave of absence, the employer shall compensate such employee at a pro rata rate for such part of the 15 days not granted: *Provided*, That nothing herein contained shall prevent the employer and the employee from agreeing in particular cases upon a cumulative period of leave of absence.

#### ARTICLE 4.

Seven hours of service shall constitute a day's work for telegraphers working split tricks at any place, and no trick to be split more than once.

In denying the proposal for a wage increase contained in article 5, the following statement was made by the board:

The next finding relates to the extent of the grant, if any, which can be made in excess of the grants made by virtue of the previous findings. Findings 1 to 4, inclusive, absorb about \$50,000 per annum, or, approximately, one-fifth of the total surplus from operation remaining for distribution among the various claimants. A careful analysis of the financial reports of the railway companies involved in this proceeding does not reveal any appreciable resources available for present purposes in excess of the aforesaid \$251,000.

In connection with the above finding an extended statement was made by the board relative to the claims of the stockholders, the employees, and the public to participation in the surplus earnings of the railroad and to the relative merits of the claims of telegraphers and other classes of employees for an increase in wages. In conclusion, the board states in part:

In view of considerations like those that have just been stated, we can not lead ourselves into the conclusion, in justice to other classes of employees and in justice to the respective companies, that we can consistently, fairly, and justly make awards to the telegraphers in excess of those already made. We regret that this must be our conclusion; but the facts as we see them compel this conclusion, and we wish to state again that it is our impression, although we can not state it as our final conclusion for the reason as aforesaid, that other classes of wage earners have not had a hearing upon this matter; that the telegraphers might well be regarded as preferred claimants to surpluses available for wage increases accruing from operations of the railways in the future. That is, we have a feeling that at the first opportune and suitable time when the Illinois Central Railroad Co. and affiliated companies can afford a wage increase the telegraphers should be the first to receive favorable consideration.

In connection with the various changes in working conditions proposed for consideration by the arbitration board, the suggestion was incidentally made that agents and telegraphers after five years or more service with the company should be granted annual passes. In response to this suggestion the board, after stating that this was something which could not be required by statute nor enforced by order of a board of arbitration, further stated:

In view of the annual leave of absence awarded agents and telegraphers by this board, the annual pass receives an enhanced value, because of the greater opportunity offered for its use. We therefore respectfully recommend to the management of the railway companies, parties to these proceedings, that they grant to their respective agents and telegraphers who have been in their employ for five years or more an annual pass during the continuance of their employment as agents and telegraphers.

# As to the other proposals the award stated:

Except in so far as modified by the above finding, no change shall be made in the wages or working conditions of the employees party to this arbitration, on account of the determinations and conclusions of this board of arbitration.

The arbitration award was signed by each of the three members of the board, J. A. Newman, the arbitrator selected by the employees, stating:

I concur in the above findings of the board, except in the refusal to grant the increase in wages.

APPLICATION OF THE AWARD.

By a comparison of the official schedule of rules and regulations in force on the Illinois Central system immediately before the award of the board of arbitration with the schedule framed in conformity with the decision of the board, the following changes in rates of pay and working conditions are shown to have been made as a result of the arbitration.

(A) RATES OF PAY.

A comparison of the old and new schedules shows that as a result of the arbitration award the overtime rate of 35 cents per hour at (BD) office, New Orleans, and (X) office, Chicago, and of 25 cents per hour at all other offices, was increased to a rate of 45 cents per hour at (X) office, Chicago; (BD) office, New Orleans; and (MN) office, Mounds.

(B) WORKING CONDITIONS.

The basis of a day's work in offices operated continuously day and night where three or more telegraphers were employed in service covered by the 9-hour provision of the hours-of-service law was fixed at 9 consecutive hours compared with a day of 11 hours, including meal hour, prior to the award.

The basis of a day's work for telegraphers in (X) office, Chicago; (MN) office, Mounds; and (BD) office, New Orleans, was fixed at 8 consecutive hours, as compared with a day of 10 consecutive hours, including 1 hour for meals, at the designated Chicago and New

Orleans offices, prior to the award.

The hours of service of telegraphers working split tricks were re-

duced by the award from 8 to 7 hours per day.

The basis of a day's work for copy operators and all other operators located in dispatching offices was fixed in the later schedule at 9 hours per day as compared with the former basis of 9 hours for copy operators and 10½ hours, including 1 hour for meals, for all other operators located in dispatching offices.

In conformity with the award the new schedule provided for an allowance of 15 days annual leave of absence with pay for telegraphers working 10 hours or more per day, no stipulation for leave of absence with pay having been contained in the schedule in effect before the

arbitration.

# EIGHT RAILROADS LEADING OUT OF CHICAGO AND SWITCH-MEN'S UNION OF NORTH AMERICA: 1910.

THE SWITCHMEN'S CASE OF 1910.

In 1910 there was an arbitration of certain requests made by the yardmen employed by a number of western railroads. The parties to the arbitration proceedings were the conference committee of general managers representing Chicago & Eastern Illinois Railroad (Chicago switching district); Chicago Great Western Railroad (system, except Twin Cities); Chicago, Rock Island & Pacific Railway (system, except Inver Grove); Chicago Terminal Transfer Railroad (system); Lake Shore & Michigan Southern Railroad (specified yards); Michigan Central Railroad (west of Detroit River); Pere Marquette Railroad (system); Wisconsin Central Railway (Chicago switching district), and the Switchmen's Union of North America, representing approximately 3,100 yardmen in the employ of the railroads designated above. Under date of January 19, 1910, employers and employees entered into a written agreement to submit to arbitration under the terms of the so-called Erdman Act a request of the employees for certain designated increases in rates of pay.

A review of the controversy which preceded the agreement to arbitrate shows that the employees on December 13, 1909, submitted to the employers a request in writing for increases in rates of pay and for changes in rules governing working conditions, the proposed changes being embodied in a series of articles designated by the numbers 1 to 12, inclusive. On January 5, 1910, the conference committee of managers and representatives of the switchmen's union joined in a telegram to the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor requesting their action in the capacity of mediators under the terms of the Erdman Act. As a result of mediation proceedings certain articles were eliminated, agreement was reached on others, and arbitration was agreed to with respect to the following proposal for a change in the wage scale relative

to rates of pay of yardmen on the Chicago lines:

(1) Day foremen, 41 cents per hour; night foremen, 43 cents per hour; day helpers, 38 cents per hour; night helpers, 40 cents per hour. (2) An advance of 6 cents per hour shall apply to all yards on

Chicago lines.

(3) All switch-tenders, towermen, and assistant yardmasters now receiving less than helpers' pay shall receive a corresponding increase. The board of arbitration was organized March 4, 1910, and was

composed as follows:

Stephen S. Gregory, lawyer, chairman, appointed by the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor.

Carl R. Gray, vice president St. Louis & San Francisco Railway, selected by conference committee of managers.

S. E. Heberling, vice president Switchmen's Union of North

America, selected by employees.

Hearings were held in the Federal Building at Chicago. The evidence given before the board was by agreement confined to the situation in the Chicago switching district with the understanding that the final decision should be applied in all the yards expressly made subject to the arbitration. The decision of the board was announced March 22, 1910.

#### FINDINGS OF THE BOARD OF ARBITRATION.

The findings of the board of arbitration on the proposed changes in the wage scale were set forth in the concluding paragraphs of the award and provided for an increase of 3 cents per hour in the wages of switchmen, and for an increase of \$5 per month in the compensation of switch tenders and tower men in terminals and yards where one or more switch engines and switching crews were employed. The conclusions of the board with respect to testimony offered during the course of the arbitration were set forth in a series of articles, which may be summarized as follows:

(1) The scale of wages in force at the time of the arbitration was adopted in November, 1906. The cost of living in Chicago and territory immediately adjacent had in the meantime increased approxi-

mately 25 per cent.

(2) The relative efficiency of switchmen in the Chicago district had increased since 1906, due to the use of improved equipment, such as larger and more modern engines and cars. The board also inclined to the opinion that the individual efficiency or expertness of switchmen, man for man, in the yards in the Chicago district was somewhat greater in 1910 than in 1906.

(3) There had been wage increases in many if not most other crafts

and callings since 1906 in Chicago.

(4) The hazards of employment to yardmen, including switchmen, in the Chicago switching district had not increased since 1906. The tendency of improved equipment and methods had been to reduce the risks of such employment, although the fact remained that switching is a highly hazardous occupation, and that such hazards can not be ignored in estimating the proper compensation of those engaged in it.

(5) On a basis of 27 days' work per month at the rate of 10 hours per day, the average monthly earnings of switchmen in the Chicago district, as nearly as such earnings could be ascertained, varied from

\$85 to \$100 per month.

(6) In 1902, and again in 1906, increases were granted the switchmen, and immediately following increases were granted to the en-

gineers, firemen, conductors, and brakemen.

(7) Reviewing the testimony offered with respect to the financial status of each line involved, the board found that certain of the roads were dividend-paying properties and that others during the past three years had not earned the interest on their funded debt. It was held that the board should endeavor to adapt its findings to the average

financial condition of the lines involved rather than to the condition of the most prosperous road or of the road least able to pay increased

wages.

(8) The interests of those holding the stocks and bonds of the railroads involved, in the opinion of the board, required the continued operation of these roads, and the board was further of the opinion that these companies must be regarded as able to pay operating costs, including just and reasonable wages to the class of employees parties to the arbitration.

(9) The cost of equipment and railway supplies to the railroads con-

cerned in the arbitration had considerably increased since 1906.

(10) The agreement to arbitrate provided for a joint arbitration to which there were virtually two parties. While it was not improper to consider the pecuniary circumstances of each railroad company, the board overruled the suggestion of counsel for the railways that the proceedings must be considered as a separate arbitration between

each railroad concerned and its switchmen.

(11) The board overruled the suggestion made for the railroads that the making of an award against a road not earning its operating expenses would be to deprive such road of property without due process The authority of the board being derived from the agreement of the parties, it was held that such an award must be deemed a voluntary concession on the part of the railway company, and not the exercise of power against it.

In articles 12 and 13 the board awarded an increase in rates of pay

of the employees parties to the award, as follows:

(a) From all the evidence we find there should be an increase in the wages of all switchmen in the yards in the Chicago district employed by the railroads concerned in this arbitration of 3 cents per hour, and we award that the said existing wage scale of all the switchmen of all classes shall be increased accordingly, and as thus increased shall be paid by the railroads concerned in this arbitration in the Chicago switching district, and that in all other yards operated by the railroads concerned in this arbitration and covered by the agreement of arbitration a like increase per hour shall apply; and that such increase, both in Chicago territory and elsewhere, shall be retroactive as of February 10, 1910, and shall apply from that date.

(b) As to assistant yardmasters, we award no increase. As to all switch tenders

and towermen in terminals and in yards where one or more switch engines and switching crews are employed and governed by this arbitration, we find that a horizontal increase of \$5 per month in their compensation shall be made, and we award such increase and order and direct that it be made retroactive as of the 10th of February,

A. D. 1910.

The arbitration award was concurred in by the chairman, S. S. Gregory, and by arbitrator Heberling for the employees, arbitrator C. R. Gray, on the part of the conference committee of managers,

dissenting from the majority opinion of the board.

In memoranda submitted by Mr. Gray it was stated in substance that his opinion was based solely upon the fundamental principle that until a greater income could be insured at least three of the parties involved in the controversy an increase in wages could not be granted without inflicting irreparable injury. It was further urged that the income of the railroads per ton-mile and per passenger-mile was constantly decreasing, that individual States had reduced the passenger rate 33½ per cent, and that State commissions and the Interstate Commerce Commission had been and were constantly engaged in making far-reaching reductions in rates.

With respect to the factor of tonnage efficiency, it was urged in the dissenting opinion that this was an imperfect fundamental because it varied from day to day according to the flow of business and the change in the unit (car or engine) employed; that the employees themselves did not recognize it as between yards or as between crews; that they would not admit it to be a fundamental upon which a reduction in wages should be allowed if the average tonnage per man should be reduced; that its application served to directly withdraw from the railroad any opportunity through the payment of vast sums of money in the purchase of heavier engines and cars to recoup themselves for wage increases already granted.

#### APPLICATION OF THE AWARD.

In the series of statements which follow comparative figures of the rates of pay of switchmen before and after the arbitration are presented for the several railroads parties to the award. Considered in terms of percentages it will be noted that the increases ranged from a minimum of 8.1 to a maximum of 11.5 per cent, with but slight variations between the different roads. The statement below sets forth the rates of pay in the Chicago switching district before and after the award, a uniform scale of wages in this district having prevailed on all roads. The minimum percentage of increase as shown by this statement was 8.1 and the maximum 9.4 per cent.

	Ratepe	er hour.	Iner	ease.
	Before award.	After award.	Amount.	Per cent.
Chicago yards: Day foremen. Night foremen Day helpers. Night helpers	Cents. 35 37 32 34	Cents. 38 40 35 37	Cents. 3 3 3 3 3	8.6 8.1 9.4 8.8

The comparison of rates of pay for switchmen before and after the arbitration in the case of the Chicago, Rock Island & Pacific Railway Co., exclusive of yards in which the Chicago rate prevailed, is shown in the table below. The percentage of increase in the rates of pay of day foremen, as shown by this table, varied from 8.8 to 10.3 per cent. In the case of day helpers, the increases ranged from 9.7 to 11.5 per cent. Night foremen show increases of from 8.3 to 9.7 per cent; and night helpers, increases of from 9.1 to 10.7 per cent.

### Chicago, Rock Island & Pacific Ry. Co.

	Ratep	er hour.	Incre	ease.
	Before award.	After award.	Amount.	Per cent.
YARDS.				
Group 1:1	Cents.	Cents.	Cents.	
Day foremen	34	. 37	3	8.8
Night foremen	36	39	3	8.3
Day helpers	31	34	3	9.7
Night helpers	33	36	3	9.1
Group 2:2				
Day f remen	33	36	3	9.1
Night foremen	35	38	3	8.6
Day helpers	30	33	3	10.0
Night helpers	32	35	3	9.4
Group 3:3				
Day foremen	32	35	3	9.4
Night foremen	34	37	3 3	8.8
Day helpers	30	33	3	10.0
Night helpers	32	35	3	9.4
Group 4:4			_	
Day foremen	31	34	3	9.7
Night foremen	33	36	. 3	9.1
Day helpers	28	31	3	10.7
Night helpers	30	33	3	10.0
Group 5:5			_	
Day foremen	29	32	3	10.3
Night foremen	31	34	3	9.7
Day helpers	26	29	3	11.5
Night helpers	28	31	3	10.7
Group 6:6			_	
Day foremen	29	32	3	10.3
Night foremen	31	34	3	9. 7
Day helpers	27	30	3	11.1
Night helpers	29	32	3	10.3
Group 7:1				4.5
Day helpers	29	32	3	10.3

<sup>1</sup> Clinton, Iowa; Leavenworth and Herington.
<sup>2</sup> Memphis, Little Rock, Haileyville, Shawnee, Albert Lea, Muscatine, Eldon, Iona, Trenton, Horton, El Reno, and Chickasha.

3 McAlister and Oklahoma City.
4 Seneca, Bureau, Fairbury, Belleville, Phillipsburg, Goodland, Lemon, Waterloo, Eldon, Mo., McFarland, Hutchinson, Pratt, Liberal, Wichita, Caldwell, and Waurika.
5 Morris, West Liberty, Atlantic, Lincoln, Burlington, Iowa Falls, Estherville, Keokuk, and Enid.
6 Booneville, Ark.
7 Wilburtes,

7 Wilburton.

As a result of the arbitration, switchmen in the employ of the Chicago Great Western, in the yards in which the rates for the Chicago switching district were not in force, received the following percentages of increase in rates of pay:

Chicago Great Western Ry. Co.

	Rate p	er hour.	Incr	ease.
	Before award.	After award.	Amount.	Per cent.
Day foremen Night foremen Day helpers. Night helpers	Cents. 34 34 31 31	Cents. 37 37 34 34	Cents. 3 3 3 3 3	8. 8 8. 8 9. 7 9. 7

On the Lake Shore & Michigan Southern Railroad, as can be seen from the following table, the increases in rates of pay of switchmen, in the yards covered by the award, ranged from 8.3 to 9.7 per cent.

Lake Shore & Michigan Southern R. R. Co.

	Rate pe	er hour.	Incr	ease.
	Before award.	After award.	Amount.	Per cent.
Specified yards:¹ Day foremen. Night foremen. Day helpers. Night helpers.	Cents. 34 36 31 33	Cents. 37 39 34 36	Cents. 3 3 3 3 3 3	8. 8 8. 3 9. 7 9. 1

<sup>&</sup>lt;sup>1</sup> Buffalo, Erie, Ashtabula, Ashtabula Harbor, Youngstown, Sharon, Cleveland, Sandusky, Toledo, Detroit, West Detroit, Elkhart, South Bend, and La Porte.

As a result of the arbitration award switchmen employed by the Michigan Central Railroad, in yards east of Chicago and in transfer crews at Joliet, received increases in rates of pay varying from 8.3 to 9.1 per cent.

Michigan Central R. R. Co.

	Rate pe	er hour.	Incr	ease.
	Before award.	After award.	Amount.	Per cent.
Yards east of Chicago, including South Bend transfer crews at Joliet: Day foremen. Night foremen Day helpers. Night helpers.	Cents. 34 36 31 33	Cents. 37 39 34 36	Cents. 3 3 3 3 3	8.8 8.3 9.7 9.1

A comparison of the rates of pay before and after the arbitration of switchmen employed in the various yards of the Pere Marquette Railroad outside of Chicago is presented in the table below. The increases in rates of pay as a result of the arbitration were practically the same as have been noted in the case of the railroads referred to above.

Pere Marquette R. R. Co.

	Rate po	er hour.	Incr	ease.
	Before award.	After award.	Amount.	Per cent.
Group 1:1 Day foremen. Night foremen Day helpers. Night helpers Group 2:2 Day foremen. Night foremen. Day helpers. Night foremen. Day helpers. Night helpers. Group 3:3 Day foremen. Night foremen. Day helpers. Sight foremen. Day helpers. One of the helpers. Night helpers. Night helpers. Night helpers. Night foremen. Day helpers. Night helpers.	Cents. 34 36 36 31 32 32 27 28 30 31 26 27	Cents. 37 39 34 36 37 38 34 35 30 31 34 29 30 30	Cents. 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	8.8 8.3 9.7 9.1 8.8 8.6 9.7 9.4 11.1 10.7

<sup>&</sup>lt;sup>1</sup> Toledo, Detroit, and Rougemere. <sup>2</sup> Saginaw, Bay City, Ludington, Muskegon, and Grand Rapids.

<sup>4</sup> Flint, Ionia, Benton Harbor, St. Joseph, Traverse City, Plymouth, Lansing, and other yards.

# CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS RAILWAY AND ORDER OF RAILROAD TELEGRAPHERS: 1910.

(Arbitration between the Cleveland, Cincinnati, Chicago & St. Louis Railway Co. (including the Peoria & Eastern Railway) and the Order of Railroad Telegraphers.)

The controversy reviewed in this section involved stipulations submitted to the Cleveland, Cincinnati, Chicago & St. Louis Railway by the Order of Railroad Telegraphers respecting the conditions of employment of approximately 1,050 members of this order in the service of the railroad. By agreement in writing dated January 29, 1910, the matter was submitted to arbitration under the terms of the Erdman Act, the board of arbitration being composed as follows:

William J. Kerby, professor of sociology Catholic University of America, appointed by the chairman of the Interstate Commerce

Commission and the United States Commissioner of Labor.

Horace Baker, general manager of the Queen & Crescent Route,

selected by the railway company.

J. J. Dermody, vice president of the Order of Railroad Telegraphers,

selected by the employees.

Arbitration hearings were begun in Cincinnati on March 7, 1910, and the arbitration award was announced March 28 following.

#### DEMANDS OF EMPLOYEES.

The requests of the employees, as submitted to arbitration, were embodied in a series of 10 articles designated by the letters of the alphabet, (a) to (j) inclusive. Of these requests article (a) defined the classes of employees embraced in the word telegraphers as used in the schedules of rules and rates of pay submitted to arbitration; article (b) defined the basis of a day's work; articles (c) and (d) contained proposed rates of pay for overtime work, and article (e) involved the conditions under which time should be allowed for meals and compensation for work performed during the meal hour.

In article (f) it was proposed that telegraphers should be relieved from the performance of certain specified classes of work, and article (g) contained proposed rules governing seniority. In article (h) the employees stipulated that telegraphers who had been in the service one year or longer should be allowed 15 days leave of absence each year with pay. Article (i) proposed that telegraphers handling crossing gates be allowed \$7.50 per month in addition to the rate shown in the wage schedule; and article (i) proposed that telegraphers be granted a wage increase amounting in the aggregate to \$11,941.50 per month.

# FINDINGS OF THE BOARD OF ARBITRATION.

The improvements in conditions of employment secured by the employees as a result of the arbitration award included an increase in wages amounting in the aggregate to \$3,400 per month, an allowance of \$5 per month in the case of telegraphers required to handle crossing gates, relief from certain so-called special duties in certain contin-

gencies, and a stipulation that telegraphers whose hours of duty were 10 or more per day who were required to render any service on 12 or more Sundays in the year, and who had been in the service of the company two or more years, should be given 15 days vacation annually with pay, or in lieu thereof additional compensation for 15

days at their regular rates of pay.

In response to the issues involved in article (a) of the rules requested by the employees, the board of arbitration awarded that all telegraph operators, telephone operators, station agents, and levermen specified in the schedule of rules and rates of pay established by the award should be considered telegraphers, should be governed by the regulations, and should be paid the rates awarded. As contrasted with the request of the employees, the award with respect to this article differed from the request only by the omission of car distributors from the operation of the schedule.

The findings of the board were concurred in by each member,

Chairman Kerby adding the following statement:

The rates of pay and the conditions granted in the above award are not, so far as my part in the division is concerned, to be construed as giving all that the telegraphers might in other conditions legitimately ask, either in the way of compensation or working conditions. The period of depression from which business is just emerging, and the consequent physical and financial conditions of the railroads have, however, been taken into consideration, and on this account larger concessions have been refused.

#### THE AWARD IN DETAIL.

The detailed requests of the employees as compared with the findings of the board of arbitration are shown below, the articles of the requests and the award being shown in parallel columns.

#### ARTICLE A.

#### REQUESTS.

All telegraph operators, telephone operators, also station agents, and linemen specified in the schedule will be considered "telegraphers" within the meaning of these articles; irrespective of title by which designated, or character of service performed, and will be governed by the regulations and paid at the rates specified herein.

AWARD

That all telegraph and telephone operators and car distributors, also station agents and linemen specified in this schedule will be considered "telegraphers" within the meaning of these articles, irrespective of title by which designated or character of service performed, and will be governed by the regulations and paid at the rates specified therein.

#### ARTICLE B.

1. That where but one telegrapher is employed in 24 hours. 10 consecutive hours. commencing at 7 a. m. or 7 p. m., including meal hour, will constitute a day's work.

2. Where two or more telegraphers are employed, 8 consecutive hours will con-

stitute a day's work.

including meal hour, commencing between 6 and 8 a. m. or 6 and 8 p. m., will constitute a day's work.

2. Where two or more telegraphers are

1. Where but one telegrapher is em-

ployed in 24 hours, 12 consecutive hours.

2. Where two or more telegraphers are employed. 9 hours will constitute a day's work

#### ARTICLE C.

That telegraphers will be paid overtime at the rate of 35 cents per hour for all time worked outside of regular hours. If called back to the office after being relieved from duty, an allowance of 50 cents will be made, and if kept on duty more than 1 hour, overtime will be allowed at the rate of 35 cents per hour after the first hour.

Telegraphers will be paid overtime at the rate of 25 cents per hour for all time worked outside of regular hours. If called back to the office after being relieved from duty, an allowance of 50 cents will be made, and if kept on duty more than 1 hour, overtime will be allowed at the rate of 25 cents per hour after the first hour.

#### ARTICLE D.

1. That telegraphers required to meet trains within 1 hour after their regular working hours will receive 35 cents for such service and regular overtime thereafter.

2. Telegraphers required to meet trains later than 1 hour after their regular working hours will receive 50 cents for such service and regular overtime thereafter.

1. Telegraphers required to remain on duty to meet trains after the expiration of their regular assigned hours will receive 25 cents for each hour so held.

2. Telegraphers required to meet trains after being relieved will receive 50 cents for such service and regular overtime

after the first hour.

#### ARTICLE E.

That no time will be allowed for meals on tricks of 8 hours or less unless it is convenient to do so. Telegraph operators working tricks longer than 8 hours will be allowed 1 full hour for meals between 11.30 and 1.30, day and night, each day. When they can not be excused between these hours, they will be paid 35 cents and allowed 1 hour for meals as soon thereafter as practicable.

No time will be allowed for meals on tricks of 9 hours or less unless it is convenient to do so. Telegraphers working tricks longer than 9 hours will be allowed 1 full hour for meals between 11.30 and 1.30. day and night, each day. When they can not be excused between these hours, they will be paid 25 cents and allowed 1 hour for meals as soon thereafter as practicable.

#### ARTICLE F.

That telegraphers will not be required to handle switch, block or signal lamps; clean station platforms or grounds; oil interlocking plants where 8 or more levers are used; or clean snow from frogs or switches.

Where other employees are available telegraphers will not be required to clean station platforms or grounds; oil interlocking plants where 8 or more levers are used; or clean snow from frogs or switches, except in cases of emergency; not to handle switch, block or signal lamps, but will see that they are kept burning; this not to be construed to relieve telegraphers from care of train order signal lamp.

#### ARTICLE G.

That office seniority will rule in (AB) Indianapolis, (PD) Cincinnati, (M and GU) Cleveland, and a seniority list furnished the general chairman each January and July by the superintendent of telegraphers on any division who apply for vacancies in those offices will be given preference over telegraphers not in the service.

Telegraphers on any division who apply for vacancies in (AB) Indianapolis, (PD) Cincinnati, (M and GU) Cleveland, will be given preference over telegraphers not in the service.

#### ARTICLE H.

That telegraphers who have been in the service for one year or longer will be allowed 15 days leave of absence each year without loss of pay, the relief to be made in the order of their seniority.

Telegraphers whose hours of duty are 10 or more per day, who are required to render any service on 12 or more Sundays in the year and who have been in the service of the company two or more years, shall be given 15 days vacation annually with pay, or in lieu thereof, additional compensation for 15 days at their regular rates of pay.

#### ARTICLE I.

That telegraphers handling crossing gates will be allowed \$7.50 per month in addition to the rate shown in the wage scale.

Telegraphers handling crossing gates will be allowed \$5 per month in addition to the rate shown in the schedule.

#### ARTICLE J.

That an increase in wages amounting in the aggregate to \$11,941.50 per month be granted to telegraphers, such increase to be apportioned to the various positions in such manner as may be agreed upon between the management of the roads and the committee representing the employees: Provided, That in case an increase be granted and such apportionment can not be agreed upon within 15 days from the date on which the decision of the arbitrators is handed down, such increase shall be applied as a flat percentage on the respective rates of pay now in effect.

An increase in wages amounting in the aggregate to \$3,400 per month is granted to telegraphers, such increase to be apportioned to the various positions in such manner as may be agreed upon between management of the roads and the committee representing the employees: Provided, That in case such an apportionment can not be agreed upon within 15 days from the date on which the decision of the arbitrators is handed down, such increase shall be applied as a flat percentage on the respective rates of pay now in effect.

#### APPLICATION OF THE AWARD.

As compared with the wage increase requested by the employees, which would necessitate an addition of approximately 20 per cent to the annual wage disbursements of the railroad for telegraphers, the award of the board of arbitration involved an increase in the annual outlay to these employees of approximately 6 per cent over the total wage payments under the preexisting scale. Increases in the annual wage outlay for telegraphers were also made necessary by the findings of the board with respect to compensation for handling crossing gates and the allowance for vacation with pay.

Under article (i) of the arbitration award, provision was made for the payment of additional compensation of \$5 per month in the case of telegraphers required to handle crossing gates, no extra compensation for such services having been allowed under the rules in effect before the award. The concession of 15 days leave of absence with pay in certain contingencies, as awarded under article (h), may be compared with the rule in force before the award which provided for

leave without pay at the convenience of the company.

As compared with the preexisting rule the effect of the decision of the board with respect to the issues involved in article (f) was to relieve telegraphers in the contingencies enumerated of the duty

of oiling interlocking plants equipped with 8 or more levers.

A comparison of the official schedule of rules and rates of pay in effect before and after the award further shows that the rule respecting overtime in the new schedule stipulated that overtime should be paid for all time worked outside of regular hours as compared with the preexisting rule which provided for the payment of overtime for time worked after 12 hours of service.

The working conditions established as a result of the arbitration award with respect to the basis of a day's work, meal hour, and seniority, so far as can be ascertained from a comparison of the official schedules in effect before and after the award, involved no material change from the conditions existing before the arbitration.

#### VIII.

# BALTIMORE & OHIO SOUTHWESTERN RAILROAD AND ORDER OF RAILROAD TELEGRAPHERS: 1910.

The controversy in this case involved proposals presented by the employees to the employer for a general increase in the wage scale and for changes in certain rules relative to seniority, hours of service, and special duties and privileges. An agreement to submit the controversy to arbitration was entered into February 17, 1910. Hearings before the board of arbitration were commenced March 14, the award being made on April 4. The proceedings embraced approximately 360 employees in the service of the railroad company, including operators, agents, and levermen, these employees being represented in the arbitration by officials of the Order of Railroad Telegraphers.

The board of arbitrators selected to hear the case was composed

of the following members:

William J. Kerby, chairman, professor of sociology Catholic University of America.

George H. Groce, assistant to general manager Illinois Central

Railroad, selected by employer.

J. J. Dermody, vice president Order of Railroad Telegraphers, selected by employees.

#### DEMANDS OF THE EMPLOYEES.

The proposal of the employees with respect to rates of pay included a request for an aggregate increase of 18.8 per cent in the wage scale of telegraphers and station agents over existing rates, an increase in the overtime rate from 25 cents to 35 cents per hour and at the general office (SG) Cincinnati to 40 cents, an increase in the rate for "the call and first hour" when called for duty outside of regular hours, from 50 cents to 60 cents; the payment of regular overtime rates for telegraph or station service performed on Sunday; the payment of extra compensation not to exceed \$10 per month to telegraphers required to handle United States mail; the payment of extra compensation not to exceed \$15 per month to telegraphers required to do pumping; and the payment of a commission of 15 per cent on commercial telegraph business to certain classes of agents handling such business.

The following changes or modifications in the existing schedule, stated in summary form, were requested by the employees with respect to seniority, hours of service, special duties, and special

privileges:

Seniority to date from date first actual telegraph work was performed, seniority lists to be furnished the general chairman in Janu-

ary and July of each year.

A reduction in the hours of service per day from 12 to 10 consecutive hours, including meal hour at stations where but one telegrapher is employed, and from 10 to 8 hours at offices where two or more telegraphers are employed besides the station agent;  $10\frac{1}{2}$  hours, including meal hour, to constitute a day's work for exclusive agents; a reduction from 12 to 8 hours in the period necessary to constitute a day's work for telegraphers performing duties at wrecks, washouts, and other emergency offices.

The company to provide the necessary help to relieve telegraphers from the duty of scrubbing floors and cleaning outbuildings. Telegraphers in service of the company two years or more to be granted 15 days annual leave of absence with pay, those having good records

to be given in addition annual system passes.

#### AWARD OF THE BOARD OF ARBITRATION.

In response to the request of the employees involving rates of pay for regular, special, or overtime work, telegraphers and station agents enumerated in the schedule were awarded an increase of 6 per cent over existing rates of pay of such employees. The rate for overtime work at general offices (SG) Cincinnati was increased from 25 to 40 cents per hour, and telegraphers required to do pumping were awarded \$10 per month extra compensation for such labor. In other respects no increases in rates of pay or changes or modifications in the existing standards of compensation were awarded.

In response to the request for the payment of extra compensation to telegraphers required to handle United States mail, the arbitration

award contained the recommendation-

That the employer investigate the conditions under which the handling of United States mail is performed and where such duties work a hardship; it is further recommended that the employer make some arrangement which may relieve telegraphers of the actual labor in connection therewith.

A review of the decisions of the board, exclusive of those relating to rates of pay, shows that the award on the conditions noted was in substance as follows:

The rules relative to seniority, submitted to arbitration, were

awarded substantially as requested by the employees.

The basis of a day's work in stations where two or more telegraphers employed besides the station agent was fixed at 9 consecutive hours; the basis of a day's work for exclusive agents fixed at 10½ consecutive hours, including meal hour; an 8-hour day awarded for telegraphers performing duty at wrecks, washouts, and other emergency offices of like character.

The company was required to provide the necessary help to relieve telegraphers from the duty of scrubbing floors and cleaning out-

buildings.

Telegraphers whose hours of duty were 10 or more per day and who had been in the employ of the company two or more years were awarded 15 days annual leave with pay, or in lieu thereof, compensation for 15 days at their regular rates of pay.

In denying the proposal relative to the issuance of annual system passes, the statement was made by the board that "the arbitrators do not consider that the granting of passes is a proper subject of

arbitration."

Following the award the board of arbitration made certain recommendations as follows:

(1) That where it may be lawfully done, the employer furnish annual division passes to those telegraphers who have been in the employ of the company three or more years, and have good records.
(2) That the proper representative of the employer negotiate with

the commercial telegraph company doing business along its line of railroads, with a view to securing a commission for telegraphers hardling such commercial telegraph business.

(3) If within 15 days the employer and the committee representing the telegraph operators and station agents can mutually agree upon a plan other than the flat increase for the distribution of the aggregate amount represented by the 6 per cent increase, the board recommends that it be done.

The arbitration award was signed by each of the three arbitrators,

Mr. Dermody adding the following dissent:

I concur in the findings of the board, except in the matter of the increase granted, which is not sufficiently above the present rates of pay to meet the ordinary living expenses of many of the employees. I believe that the employer is financially able to meet all the requests made by the telegraphers and station agents for increased compensation.

# THE AWARD OF THE BOARD AND THE REQUESTS. OF EMPLOYEES COMPARED.

The detailed requests of the employees as compared with the findings of the board of arbitration are shown below, the articles of the requests and the awards being shown in parallel columns.

REQUESTS OF RAILROAD TELEGRAPHERS. AWARD OF THE BOARD OF ARBITRATION.

# ARTICLE A.—Seniority.

(1) Shall seniority date from the date first actual telegraph work is performed? (2) Shall seniority lists on each division be furnished the general chairman in January and July of each year?

(1) Seniority shall date from the day on which first actual work is performed.

(2) Seniority lists on each division shall be furnished the general chairman in January and July of each year.

#### ARTICLE B.—Overtime.

(1) Shall the overtime rate be increased from 25 to 35 cents per hour, or in any amount, regardless of locality, except at the general offices (SG), Cincinnati? Shall the overtime at the general offices (SG), Cincinnati, be fixed at 40 cents per hour?

(2) Shall the present rate of 50 cents for the call and first hour be increased to

60 cents or increased at all?

(3) Shall telegraphers performing telegraph or station service on Sundays receive pay at regular overtime rates?

- (1) The overtime rate shall remain at 25 cents per hour except at the general offices (SG), (incinnati, where it shall be 40 cents per hour.
- (2) The present rate of 50 cents for call and first hour shall remain.
- (3) Telegraphers shall not receive overtime pay for Sunday work.

#### ARTICLE C .- Hours.

(1) Shall 10 consecutive hours, including meal hour, constitute a day at stations where but one telegrapher is employed, and shall 8 consecutive hours constitute a day at offices where two or more telegraphers are employed besides the station agent?

(1) Twelve consecutive hours, commencing between 6 and 8 a. m. or 6 and 8 p. m., including meal hour, shall constitute a day's work at station where but one telegrapher is employed. 9 consecutive hours shall constitute a day's work at offices where two or more telegraphers are employed besides the station agent. (2) Shall the 8-hour day be applicable to telegraphers performing duties at wrecks, washouts, and other emergency

10½ consecutive hours, including meal hour, shall constitute a day's work for exclusive agents.

(2) Eight hours shall constitute a day's work for telegraphers working at wrecks, washouts, or other emergency offices of like character.

# ARTICLE D.—Special duties.

- (1) Shall the company provide necessary help to relieve telegraphers from the duty of scrubbing floors and cleaning outbuildings?
- (1) The company shall provide necessary help to relieve telegraphers from the duty of scrubbing floors and cleaning outbuildings.

# ARTICLE E.—Special privileges.

- (1) Shall all telegraphers in service with the company two years or more be granted leave of absence each year for 15 days without loss of pay?
- (1) Telegraphers whose hours of duty are 10 or more per day, and who have been in the employ of the company two or more years shall be given 15 days annual vacation with pay, or in lieu thereof additional compensation for 15 days at their regular rates of pay.
- (2) Shall annual system passes be issued to all telegraphers in service with the company two years or more, who have good records?
- (2) The arbitrators do not consider that the granting of passes is a proper subject for arbitration. Hence the board refuses to award annual system passes to all telegraphers.

#### ARTICLE F .- Remuneration.

(1) Shall telegraphers who are required to handle United States mail receive \$10 per month extra pay, or pay in any sum for this service?

(1) The arbitrators recommend that the employer investigate the conditions under which the handling of United States mail is performed, and where such duties work a hardship, it is further recommended that the employer make some arrangement which may relieve telegraphers of the actual labor in connection therewith.

(2) Shall telegraphers required to do pumping receive \$15 per month, or any sum as extra pay?

(2) Telegraphers required to do pumping shall receive \$10 per month extra compensation for such labor.

(3) Shall the following rule granting commission on commercial telegraph business become effective? At exclusive agencies first-trick operators, or where the agent-operator works first trick, they will be designated as manager of such offices. All managers of such offices will be allowed a commission of 15 per cent on all commercial telegraph business: Provided, however, That at exclusive agencies where there is no day operator and there is a night operator, then the night operator shall be known as manager and re-

ceive the commission.

(3) The employer being only indirectly concerned in the handling of commercial telegrams, the board of arbitration makes no ruling to affect existing conditions.

# ARTICLE G .- Wage scale.

Shall the wages of the operators and station agents shown in the schedule be increased in the aggregate 18.8 per cent over the present rates, the same to be distributed in accordance with the schedule of wages submitted by the employees to the employer attached hereto and marked "Exhibit A"?

The wages of the telegraph operators and station agents enumerated in the schedule attached to the agreement for arbitration and dated February 17, 1910, shall be increased 6 per cent over the present rates of pay of said telegraph operators and station agents.

# RAILROADS IN WESTERN TERRITORY AND BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN: 1910.

LOCOMOTIVE FIREMEN'S ARBITRATION IN WESTERN TERRITORY IN 1910.

#### HISTORY.

This arbitration was the result of a controversy that had its inception on or about December 27, 1909, when a series of conferences began between the managers' committee of certain designated western railroads and representatives of the Brotherhood of Locomotive Firemen and Enginemen representing the employees. These conferences, 21 in number, continued from December 27, 1909, to February 2, 1910, inclusive, and letters under date of December 27, 1909, January 15, 19, 22, 24, 27, 31, and February 1 and 2, 1910, were exchanged, all with the idea of attempting to reach an agreement on proposals made by the employees interested for increases in wages and certain changes in working conditions. These conferences and this correspondence, however, failed to bring about an agreement on any of the points in controversy. On March 5, the chairman of the managers' committee, W. C. Nixon, representing the railroads involved, requested mediation under the terms of the Erdman law, and on March 15, 1910, W. S. Carter, president of the Brotherhood of Locomotive Firemen and Enginemen, acting for the employees, accepted the offer to mediate the differences. As a result of this a mediation agreement settling all points in dispute between the parties, except that for an increase in wages, was signed March 23, 1910, and a part of this mediation agreement contained a stipulation agreeing to submit this question to arbitration under the provisions of the Erdman law, waiving the right of appeal and stating that the award of the board of arbitrators was to be final and conclusive.

The arbitration agreement was signed and entered into on the 25th day of March, 1910, by W. C. Nixon, chairman of the managers' committee, representing the railroads, and W. S. Carter, president

of the Brotherhood of Locomotive Firemen and Enginemen.

#### SCOPE OF THE ARBITRATION.

The western railroads which were parties to the agreement were as follows:

Atchison, Topeka & Santa Fe Railway. Atchison, Topeka & Santa Fe (Coast Lines) Canadian Northern Railway. Chicago & North Western Railway. Chicago & Alton Railroad. Chicago, Burlington & Quincy Railroad. Chicago Great Western Railroad. Chicago Junction Railway.

Chicago, Milwaukee & St. Paul Railway. Chicago, Rock Island & Pacific Railway. Chicago, St. Paul, Minneapolis & Omaha Chicago Terminal Transfer Railroad.

Chicago & Western Indiana Railroad and Belt Railway of Chicago.

Colorado & Southern Railway.

Davenport, Rock Island & Northwestern

Railway.

Duluth, South Shore & Atlantic Railway. El Paso & Southwestern Railroad. Eastern Railway of New Mexico and

Southern Kansas Railway of Texas. Fort Worth & Denver City Railway. Great Northern Railway

Gulf, Colorado & Santa Fe Railway. Houston East & West Texas Railway. Houston & Texas Central Railroad. Illinois Central Railroad.

International & Great Northern Rail-

Indianapolis Southern Railroad. Kansas City, Mexico & Orient Railway. Kansas City Southern Railway. Missouri, Kansas & Texas Railway. Missouri Pacific-Iron Mountain System. Minneapolis, St. Paul & Sault Ste.

Marie Railway. Minnesota Transfer Railway. Mineral Range Railroad. Northern Pacific Railway.

Oregon Railroad & Navigation Co. Peoria & Pekin Union Railway Quincy, Omaha & Kansas City Rail-

San Pedro, Los Angeles & Salt Lake Railroad.

St. Joseph & Grand Island Railway.

St. Joseph Terminal Railroad. St. Louis & San Francisco Railroad. St. Louis, Brownsville & Mexico Rail-

way. Southern Pacific (Pacific System). Southern Pacific (Atlantic System). San Antonio & Aransas Pass Railway.

Spokane, Portland & Seattle Railway.
Texas & Pacific Railway.
Trinity & Brazos Valley Railway.
Union Pacific Railroad.

Wichita Valley Railway.

#### THE MATTERS IN CONTROVERSY.

Section 2 of the agreement, which contained the questions to be arbitrated, read as follows:

The questions to be arbitrated shall be the following requests that have been submitted to the employer by the employees, being embraced in article 1 of the propositions contained in the letter of the employees to employer of date January 24, 1910, as follows:

#### ARTICLE 1.

(a) Firemen in main line and branch passenger service shall be granted an increase

of 25 cents per hundred miles or less.

(b) Firemen in through and irregular freight, mixed, work, wreck, gravel, helper, pusher, snow-plow, and branch service (except Mallet type engines) shall be granted an increase of 40 cents per 100 miles or less: Provided, That on simple engines having cylinders 24 inches or over in diameter and on compound engines weighing 215.000 pounds or more on drivers, firemen shall receive not less than \$3.85 per 100 miles

(c) Firemen in local or way freight service shall be granted an increase of 10 per

cent over through-freight rates as established at this conference.

(d) Firemen on Mallet type engines shall receive \$4.20 per 100 miles or less in all classes of service. This rate shall also apply on lines where the schedules provide for trip basis in helper or pusher service, in accordance with rules in effect. (e) Firemen in yard service shall be granted an increase of 35 cents per day.

(f) Where rate of pay is provided for transfer service, firemen shall be granted an

increase of 35 cents per day.

(g) On lines where rates of pay are negotiated through the B. of L. F. & E. committees for hostlers, switch engineers, and engine dispatchers, such employees shall

be granted an increase of 50 cents per day.

(h) The above increases shall be based on rates of pay in effect January 1, 1910, except that the differential as between through and local freight shall be based on the through freight rate established at this conference. Overtime shall be paid for pro-

The employees appointed Timothy Shea, of Peoria, Ill., to act as a member of this board of arbitration and the employers appointed W. R. Scott, and these two arbitrators notified Martin A. Knapp, chairman of the Interstate Commerce Commission, on April 2, 1910, that they were unable to agree upon a third arbitrator and asked that he appoint one as provided by law. In compliance with this request and by virtue of the authority conferred upon them (the chairman of the Interstate Commerce Commission and the Commissioner of Labor) by the terms of the Erdman law, announced the appointment of William L. Chambers, of Washington, D. C., as the third arbitrator to act with the two arbitrators already appointed.

The board of arbitrators convened in the United States circuit court room, northern district of Illinois, eastern division, in the Federal building, at Chicago, Ill., on Monday, May 16, 1910, at 10 o'clock a. m., in pursuance of the articles of agreement made and entered into between the said railroad companies and the Brotherhood of Locomotive Firemen and Enginemen.

The testimony of various witnesses, comprising 2,966 typewritten pages, was taken from day to day, beginning on the 16th of May, 1910,

and concluding on June 3, 1910.

After arguments by counsel the matter was submitted for decision and the arbitrators reached their conclusions and announced their award on June 4, 1910.

#### REQUESTS AND AWARD COMPARED.

All articles in requests made by the firemen with the exception of Article I, covering rates of pay, were agreed upon in conferences between the officials of the railroads and the representatives of the firemen's organization. Article I of the firemen's requests, the basis of the arbitration proceedings, is compared below with the award of the arbitration board.

#### REQUESTS.

(a) Firemen in main and branch line passenger service to receive an increase

of 25 cents per 100 miles or less.

(b) In through or irregular freight, mixed, work, wreck, gravel, helper, pusher, snow-plow, and branch freight service (except Mallet) to receive an increase of 40 cents per 100 miles or less, provided that the rate of pay per day or 100 miles shall not be less than \$3.85 on simple engines with cylinders 24 inches or over in diameter or on compound engines weighing 215,000 pounds or over on drivers.

(c) Rates in local or way freight to be 10 per cent greater than in through

freight.

(d) On Mallet engines, the rate to be \$4.20 per 100 miles or less in all branches of service.

(e) The rate for yard service to be in-

creased 35 cents per day.

(f) Same increase (35 cents) as in yard service shall be paid to transfer service.

(g) Hostlers, switch engineers, and engine dispatchers to receive an increase of 50 cents per day on lines where they are represented by the Brotherhood of Locomotive Firemen and Enginemen.

#### AWARD.

- (a) Awarded 15 cents per 100 miles.
- (b) Awarded 15 cents per 100 miles on oil-burning locomotives, and 30 cents per 100 miles on coal-burning locomotives.

Awarded \$3.75 per day. Where the same or higher rate is now paid on these engines there will be no increase.

- (c) An increase of 25 cents per 100 miles awarded, except on roads having an 8-hour day. Existing differentials to be maintained.
- (d) Four dollars per day allowed in all

branches of service.

(e) An increase of 25 cents per day awarded.

(f) An increase of 25 cents per day awarded.

(g) An increase of 25 cents per day awarded.

The increases above awarded were made retroactive as of May 16, 1910.

All awards were unanimous except that on Article I. Mr. Shea, representing the men, dissented from this.

EFFECT OF APPLICATION OF AWARD OF ARBITRATION BOARD ON INDIVIDUAL RAILROADS.

No uniform basis for the payment of locomotive engineers has up to the present time been adopted in the territory east of the Ohio and north of the Potomac rivers. Some railroads classify their rates of pay according to the size of cylinders, others according to weight on drivers, still others according to the number of wheels, and according to the trade name of the engines. Not until the year 1913 were the rates of pay to locomotive firemen in the eastern territory standardized according to weight on drive wheels, and the same basis of payment, both to engineers and firemen in the West, was not adopted until the year 1915. As a consequence, it was impossible, with the printed working schedules as a basis, to make any comparative study as to how rates of pay to engineers and firemen were affected by awards of arbitration boards. Methods of wage payment were frequently changed by the application of the decision of arbitration boards.

Under these conditions, it was decided to use as a basis of comparison of rates of pay the classification of locomotives required by the Interstate Commerce Commission. Up to the fiscal year 1915 this classification was uniformly used by the railroads in reporting to the commission. In the following comparisons the figures relative to the number of locomotives and their average weight on drivers (tons), prior to the fiscal year 1915, are based on information secured from pages 103 to 107 of the annual reports of the carriers to the Interstate Commerce Commission. In the form of annual report adopted for use in 1915 there were considerable changes made throughout, and locomotive classification was furnished in a different manner by the carriers. Because of this variation it was necessary to request the railroad companies to furnish data on locomotive equipment that would be comparable with prior years.

After the information as to number and weight of locomotives in the various classifications was secured from the annual reports of the railroads to the Interstate Commerce Commission, printed forms were mailed to the companies to be filled out. Each sheet was divided into three similar sections, providing for single-expansion, four-cylinder compound, and two-cylinder compound or cross-compound locomotives. The information requested from the carriers was as follows:

(a) Class of service in which each locomotive was engaged.

(b) Weight on drivers.

(c) Number of locomotives of each class.

(d) Rates of pay per day of 100 miles or 10 hours or less to (1)

engineers, (2) firemen.

Because of the change in the 1915 reports, mentioned above, a special sheet for this year was prepared and sent to the railroad companies requesting, in addition to the other inquiries listed, the average weight on drivers (tons) of locomotives. The printed forms sent to the railroads were for the fiscal years prior and subsequent to any arbitration proceedings they were involved in, either with their engineers or firemen.

In the following derivative tables, rates of pay to locomotive firemen and hostlers are shown prior and subsequent to the award of the

arbitration board in western territory of June 4, 1910.

Rates paid to locomotive firemen before and after the arbitration of 1910, and amount and per cent of increase in rates awarded by the arbitration board according to class of engines.

ATCHISON, TOPEKA & SANTA FE RY.

	Nun	nber.	weig dri	erage ht on vers ns).	Rate	per da or 10	y of 100 m hours or le	iles or less
	1909	1911	1909	1911	1909	1911	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SWITCHING SERVICE.								
Class A2, OO>: Oil				51	\$2.30	\$2.55	\$0.25	
First -class yards <sup>2</sup> Second-class yards Class A3, OOO>:		56			2. 25 2, 15	2. 50 2. 40	. 25 . 25	11. 1 11. 6
Class A3, 000>: Oil. Coal. Strong City and Bazar, Kans.¹ First-class yards 2 Second-class yards Class A4, 0000> Strong City and Bazar, Kans.¹ First-class yards 2 Second-class yards 2 Second-class yards 2	108	74	59	56	2.30 2.25	2. 55 2. 50	. 25	10.9 11.1
Second-class yards Class A4, 0000> Strong City and Bazar, Kans. First class yards 2		7		68	2. 15	2. 40	. 25	11.6
Second-class yards. Class C3, OOOoo>: Oil	20	20	45	45				
Class C3, OOOoo>: Oil Coal Strong City and Bazar, Kaus.¹ First-class yards 2 Second-class yards					2.30 2.25	2. 55 2. 50 2. 40	.25 .25 .25	10.9 11.1 11.6
Second-class yards Class C4, OOOOoo>: Oil Coal Strong City and Bazar, Kans.!	3 3	6	52 52	52	2.10	2,40	.25	
Strong City and Bazar, Kans. <sup>1</sup> First-class yards <sup>2</sup> Second-class yards					2, 25	2.55 2.50 2.40	. 25 . 25 . 25	10.9 11.1 11.6

¹ Special rate account partially road service.
² First-class yards (all others second-class yards): Chicago, Ill.; Corwith, Ill.; Shopton, Iowa; Kansas City, Mo.; Topeka, Kans.; Argentine, Kans.; Emporia, Kans.; Arkansas City, Kans.; Chanute, Kans.; Wellington, Kans.; Dodge City, Kans.; Newton, Kans.; La Junta, Colo.; Pueblo, Colo.; Raton, N. Mex.; Las Vegas, N. Mex.; Albuquerque, N. Mex.; Gallup, N. Mex.; Winslow, Ariz.; Seligman, Ariz.; Los Angeles, Cal.; Barstow, Cal.; Barstow, Cal.; Fresno, Cal.; San Francisco, Cal.; El Paso, Tex.

	2		A el	A. er 1ge weight on				Ra	te per	day of	Rate per day of 100 miles or less or 8 hours or less in specified territories.	r less or	8 hour	or les	s in specifi	ed territ	ories.			
		Der.	drivers (tons).	ers as).			Plains.			N	Mountain.				Valley.				Desert.	
							Increase	ase.			Increase.	ase.			Increase	ase.			Increase.	аѕе.
	1909	1161	1909	1161	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.	1909	1161	Amount.	Per cent.
PASSENGER SERVICE. SINGLE-EXPANSION LOCO-																				
MOTIVES.																				
Oil.	220	88	32	32							1 1									
Less than 18-inch cylinders 1.				-	\$2,35				. \$2, 35	\$2.50	\$0.15	6.4		\$2.50	\$0.15					
Do. 2.		: :			2.30	\$2.40	\$0.15	6.7		2. 40			2.30	2.45	.15	6.5	\$2, 25	\$2.40	\$0.15	6.7
I8-meh cyfinders and over 4				:	2.50	2.65	.15	6.0	2.50	2.65	.15	6.0	2.50	2.65	.15	6.0	2.50	2.65	.15	6.0
Oil. Coal.	25	37	51	51															0 0	
icheyl-				i	2.35				. 2,35	2.50	.15	6.4	2.35	2.50	.15	6,4			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
					2.25	2.40	.15	6.7		2.40			2.25	2.40	.15	6.7	2, 25	2.40	.15	6.7
OVer 4.	;			:	2.50	2.65	.15	0.9	2.50	2.65	.15	0.9	2.50	2.65	.15	6.0	2.50	2.65	.15	6.0

1 Pueblo, Colo., to Denver, Colo.; La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., Clovis, N. Mex., to Belen, N. Mex., and south of Albu-

querque.

2 Ration, N. Mex., to Las Vegas, N. Mex.

2 Chicago to Canon City, Colo., including branches.

4 All territory east and west of Albuquerque, except between Pueblo, Colo., and Denver, Colo.

The continue of the continue		Number	her	Average weight or	age t on				Rat	e per d	ay of 1	00 miles or	r less or 8	hours	or less	Rate per day of 100 miles or less or 8 hours or less in specified territories	l territo	ries.			
1909   1911   1909   1911   1909   1911   Amount,   Per   1909   1911   1909   1911   Amount,   Per   1909   1911   Per   19		n n	. Jack	driv (ton	ers			Plains.			Mc	yuntain.				Valley.				Desert.	
1909   1911   1909   1911   1909   1911   Amount,   Per   1909								Incres	sse.		,	Incre	ase.			Increa	se.			Incre	ase.
29         74         75           20         74         94         82.35         82.40         80.15         6.4         82.35         82.40         80.15         6.4         82.35         82.40         80.15         6.4         82.35         82.40         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.4         80.15         6.6         80.15         6.0         2.50         2.65         1.5         6.0         2.50         2.65         1.5         6.0         2.50         2.65         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         8.6         1.5         1.5         8.6         1.5         1.5         1.5         1.5         1.5		1909	1161	1909	1161	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.
29	PASSENGER SERVICE—Continued.																				
26         74         75         82.35         82.56         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.7         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.4         82.35         82.50         80.15         6.7         80.15         6.7         80.15         6.7         80.15         6.7         80.15         6.7         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15         80.15	SINGLE-EXPANSION LOCO- MOTIVES—continued.																				
26         74         94         22.35         22.40         80.15         6.4         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35         82.35	Class F3, 000000>:		17		75																
2 256 \$2.40 \$80.15 6.7 2.65 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.45 .15 6.0 2.55 2.85 2.45 .15 6.0 2.55 2.85 2.45 .15 6.0 2.55 2.85 2.45 .15 6.0 2.55 2.85 2.85 2.85 2.85 2.85 2.85 2.85	Coal Less than 18-inch cyl- inders <sup>1</sup>	::	26	74		\$2.35				35	\$2.50	\$0.15	6.4	\$2,35	\$2.50	\$0.15	6.4				
1 2 50 2.65 3.15 6.0 2.65 3.15 6.0 2.65 3.15 6.0 2.50 2.65 3.15 6.0 2.50 2.65 3.15 6.0 2.50 2.65 3.15 6.0 2.50 2.65 3.15 6.0 2.50 2.65 3.15 6.0 2.50 3.65 3.15 6.0 3.50 3.65 3.15 6.0 3.50 3.65 3.15 6.0 3.50 3.65 3.15 6.0 3.50 3.65 3.15 6.0 3.50 3.50 3.65 3.15 6.0 3.50 3.50 3.65 3.15 6.0 3.50 3.50 3.65 3.15 6.0 3.50 3.50 3.65 3.15 6.0 3.50 3.50 3.65 3.15 6.0 3.50 3.50 3.50 3.50 3.50 3.50 3.50 3.	Do.* Do.*					2.30	\$2.40	\$0.15			2.40			2.30	2.45	.15	6.5	\$2.25	\$2.40	\$0.15	6.7
2 50 5 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 2 80 15 6 15 6 15 6 15 6 15 6 15 6 15 6 15	Over 4	:				2.50	2. 65	.15	6.0	2.50	2.65	.15	6.0		2.65	.15	6.0		2.65	.15	6.0
121   120   53   56   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15   64   15	135,000 pounds on drivers 8		:		:	2.50										1					
121   120   53   56   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125   125	Do. 1									2, 70	2.2.3 8.85	51.	5.6	22.70	2.85	.15	5.6			1 7	1
121 120 53 56 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2.50	Do. 4						2.65							2.65	2.80	c1.	5.7	2. 65	2.30	cI.	D. 7
121         120         53         53         53         53         2.35         2.50         .15         6.4         2.35         2.45         .15         6.4         2.35         2.40         .15         6.7         2.40         .15         6.7         2.40         .15         6.0         2.50         2.45         .15         6.0         2.50         2.40           121         6.0         2.50         2.65         .15         6.0         2.50         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.50         2.65         2.65         2.65 </td <td>FOUR-CYLINDER COM- POUND LOCOMOTIVES.</td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	FOUR-CYLINDER COM- POUND LOCOMOTIVES.											•									
121   120   53   53   2.55   2.50   15   6.4   2.35   2.50   15   6.4   2.35   2.40   15   6.5   2.40   2.55   2.40   2.55   2.65   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2.55   2	Class F2, 00000>:		52		26																
2.25 2.40 .15 6.7 2.40 .26 .25 .15 6.0 2.65 .15 6.0 2.55 2.55 2.55 2.55 2.55 2.55 2.55 2.	Less than 18-inch cyl- inders <sup>1</sup>	121	120	200	22	2.35				2.35	2.50	LC.	6.4	2.35	2.50	10	6.4				
2 50 2 65 .15 6.0 2.50 2.65 .15 6.0 2.50 2.65 .15 6.0 2.50 2.65 .15 6.0 2.50 2.65 .15 6.0 2.50 2.65	Do. 2 Do. 8					25.30	2.40	.15	6.7		2.40			25.25	2,45	35.5	6.5	2.25	2.40	.15	6.7
	Over 4  Do. 6					2.50	2.65	.15	6.0	2.50	2.65	.15	6.0	2.50	2.65	.15	6.0	2. 50	2.65	.15	6.0

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1 Pueblo, Colo., to Denver, Colo.; La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.; Clovis, N. Mex., to Belen, N. Mex., and South of Albu-

querque.
Raton, N. Mex., to Las Vegas, N. Mex.
Raton Canon City, Colo., including branches.
All territory east and west of Albuquerque, except between Pueblo, Colo., and Denver, Colo.
Albuquerque, N. Mex., to Bakersfield, Cal., only.
Pueblo, Colo., to Denver, Colo.

	7	-	Ave	rage nt on				Rate	per da	3y of 10	00 miles or	less or 1	0 hour	s or lea	Rate per day of 100 miles or less or 10 hours or less in specified territories.	ed territ	ories.			
	Number.	iber.	drivers (tons).	rers ns).			Plains.			Mo	Mountain.		•		Valley.			П	Desert.	
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FREIGHT SERVICE. SINGLE-EXPANSION LOCOMOTIVES. Class B3, 0000>:		. 69		57.0																
Coal. Oil burners <sup>1</sup> Do. <sup>2</sup>	21	19	19	62	\$2.95 2.85	\$3.10	\$0.15	7.07												
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Do.8 Do.9 Do.9 185,000 nonnels or									2.95	3.15	15.	5.0.0	\$2.85	\$3.00	\$0.15	5.3	\$3.10	\$3, 25	\$0.15	4.8
Over on drivers Do.* Do.* Do.* Do.*					3.00	3.15	.15	5.0		3.50	15	4.5								
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l burners— Less than 135,000 p o u n d s o n drivers 6 Do.* Do.* Do.8 Do.9	135,000 pounds or over on drivers 1 Do.2 Do.4 Do.4 Do.4 Do.4 Do.4 Do.5 Do.5 Do.6 Do.6 Do.6 Do.6 Do.6 Do.6 Do.6 Do.6	Class C2, OO00>: Oil. Coil burners I.		
Coal burners— Less than 135,000 p o u n d s o r drivers 6 Do.? Do.? Do.8 Do.9 Do.9	200 pounds er on drive Do 2 Do 4 Do 5	s C2, OOoo>: Oil Coal Oil burners 1	Do.4 Do.8 Do.9 Do.10	DO: 10
Less Less dr	135,0	s C2, OOoo> Oil. Coal. Oil burners Do.	Do.1. Do.4. Do.8. Do.9. Do.9. Do.9. Do.10. Do.10. Do.10. Do.10.	00000 00000 00000 00000
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Chicago to Canon City, Colo. (1909): Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex. (1911). Starkville, Colo.; Blossburg and Hebron coal runs.

Position and Perver, Colo.; La Junta, Colo.; Mex., and south of Albuquerque, N. Mex., coal runs (1909). Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Colo.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1909). Chicago to Canon City, Colo.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1911).

Waynoka, Okla., to Pecces, Tex.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1911).

Pueblo to Derver, Colo.; Raton to Las Vegas, N. Mex., south of Albuquerque, N. Mex.

Jos Angeles and Valley divisions; lines south of Barstow, Cal.

Pueblo, Colo., to Raton, N. Mex., to Santa Fe, N. Mex.

Pueblo, Colo., to Denver, Colo.; Lamy, N. Mex., to Santa Fe, N. Mex.

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Chicago to Canon City, Colo. (1909); Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex. (1911). 2 Starkville, Colo.; Blossburg and Hebron coal runs. 8 Santa Fe District, Lamy, N. Mex., to Santa Fe, N. Mex. 4 Los Angeles and Valley divisions; lines south of Barstow, Cal.

Piueblo, Colo., to Denver, Colo.
 La Junia, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., south of Albuquerque.
 La Junia, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., to Las Vegas, N. Mex.
 Raton, N. Mex., to Las Vegas, N. Mex.
 Albuquerque, N. Mex., to Bascarfeld, Cal.
 La Junia, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Las Vegas, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex.

	,		Average weight on	age				Rat	be per c	lay of 1	Rate per day of 100 miles or less or 10 hours or less in specified territories.	less or 10	0 hours	or less	in specifi	ed territ	ories.			
	Number.	iber.	drivers (tons).	ers			Plains.			M	Mountain.				Valley.			1	Desert.	
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FREIGHT SERVICE-Con.																				
SINGLE-EXPANSION LOCO- MOTIVES—continued.																				
Class E4, 0000000>	75	3.0	100	100																
Do.1					\$5.00	\$3.75	\$0.75	25.0												
Do.3							:	31.0	195	\$3.75	\$0.92	32.5								
Do.5									3.45 3.05		08.		\$2.95	\$3.75	\$0.80	27.1				
Do.6	:								3.25	3.75	.50	15.4								
Dos									3.30		0 <del>4</del> .	11.9					\$3.35	\$3.75	\$0.40	11.9
Class E5, 0000000>:	2	-	115	1117		:								:			:			
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Do. 2.					2.85	3.00	I5	5.3			1									
Do. 4									3.45	3.60	.15	6.60	::							
Do. 5 Do. 6	:	:									25	4.6	2.95	3.75	æ.	27.1	-			
Do. 7									3.35	3.50	.15	4.5						È		
Coal burners 1					3.00	3.75	. 75	25.0									6. 99	6. 73	04.	a.11.
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Do. 4									3.45	3.75	.30	0.00								
Do. 6									3.25	3.75	. 50	15.4	2. 95	3.75	æ.	27.1				
Do. 8									3.35		. 40	11.9					3.35	3.75	.40	11.9
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FOUR-CYLINDER COM- FOUND LOCOMOTIVES.	Do.1	Do 2	Do.9	Do 10	Dos	Class B4, 000000>:	Oil	Coal	Oil burners—	Less than 135,000	bounds on driv-	Ors 11	1)0.12	Do 3	DO. 2	170.4	Do. 5	1)0.8	135.000 pounds or	over on driv-	ers 1	Do 2	Dog	Do 10	10.3	Do. 5	1)0.8	Coal burners—	Less than 135,000	pounds on driv-	ers 11	Do. 12	Do. 3	Do. 4	Do. 5	Do. 8

Chicago to Canon City, Colo. (1909), Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex. (1911).

2 Starkville, Colo.: Blossburg and Hebron coal runs.
8 Santa Re District, Lamy. N. Mex., 10 Santa Re., N. Mox.,
4 La Junta, Colo., 10 Ranon, N. Mex.; Las Vegas, N. Mex., 10 Albuquerque, N. Mex.,
5 Los Angeles and Valley divisions; lines south of Barstow, Cal.

South of Albuquerque.

<sup>7</sup>Pueblo, Colo., io Deirver, Colo.; Raton, N. Mex., to Las Vegas, N. Mex. Albuquerque, N. Mex., to Bakersfield, Cal.

"Pueblo and Denver, Colo.; La Junia, Colo., to Baton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.

to Raton, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex., and the control of State of Canon City, Colo.; Stateville, Colo. Blossburg and Hebron, N. Mex., coal runs (1909). Chicago to Canon City, Colo.; Stateville, Colo. Blossburg and Hebron, N. Mex., coal runs (1911).

Fig. Pueblo to Denver, Colo.; Raton to Las Vegas, N. Mex., south of Albuquerque, N. Mex.

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ries.			1909	10 10 10 10 10 10	3.35
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s or less			1911	83. 83. 83. 83. 83. 83. 83. 83. 83. 83.	
0 hours			1909	, 22 85 22 85 24 85	
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_		<u>:</u> :					_				:	:	:	:	:	-		_	:	:	_	_		:		122	100	15	:		:	: 34	2	2 15	2 10	_	to Wa		o Albu		
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				-						:		:	:	:	:				:					:	3.50	3.40	28.80	3.50			:	9 50	3.40	200	3.50		eton.	, ,	3S, N.	Ev.	
		:	2.65	2.95	2.75	2.05				:	:	2.65	2.95	2.75	2.95	2.85	:		:	:		_			3 35	3.25	2.65	3.35	:		-	9 9 2	2000	28	3.5		Wellir		S Vegs	, LA . 19	
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-		:					-	:		:	:	:	:	:	:	:	:	_	:	:			N.	- 15	07.				:	1	. I.S	cI.	:	:	:		City.		N.Z.	phony	tow. C
										:	:	:	:	:	:	:	;			:	_												:	:			Canor	nns.	Katon	o unit	Valley divisions: lines south of Barstow. Cal
											-		-	:		:							0 10	30.10	3				0	,	3, 15	3.6	:	:	:		300 to	coalr	do., to	anto F	South of
		2.85		:						2.75		-	:			:	:		:	:			0 05	0.6	3					3	8.6	7.85	:	:	:		S	Tebron	nta, Co	Mex.,	lines
										:			:			6			71	78					•				0								(1900	and F	La Jui	Moy	Sions
89										:									73	22				:								:	:	:	:		Colo	spurg	olo.;	as ver	my, ty
		:					:	:		-	:				:				21	201				:	:	:					:	:	:	:	:	:	n City	; Blos	IVEL, C	, to Las v	
ro		:						:	:	-				:				_	2	231						:	:				:	:	:	:			Cano	Colo.	d Der	Mex.	DISCITION SOL
il)	000	1 1		_					or .	1	:	1	1	:			:			:	000	000	- VI	_	•				-	Sor	ers1		:	0		_	ago to	-kville	blo an	Katon, N. Mex.,	Tos Angeles and
0) < 0	Less than 100,000	Do 2	Do						100,000 pounds or	over on drivers 1		Do.5.		0 0 0				:<0	Oil		1	Less than 135,000	pounds on ariv-	Dos		-		90	Do.7	135,000 pounds or	over on drivers	Do.*					1 Chic	2 Star	Pue	L Con	I Jos
0000	than	o spir	0.0	Do.6.	Do 11	Do 8		Do 7	od (	on di	Do.8	0.6	Do.6	Do.11	Do.8	Do.12	Do.7	Class E3, 00000>			On purpers—	ess the	pounc	Do &	Dos	Do 4	Dos	Do.6.	Do.	5,000 p	over o	Do.	000	Dog	000	Do 7	3				
C3.	Less	pou.	Ã	D	Č	ř	Ä	ñ	100,000	OFFE	Á	Á	Á.	Ã	Ã	Ã	Ã	3 E3, (	Oil.	Coal	ng no	Ĭ.								13											
Class																		Class																							

Albuquerque, N. Mex., to Bakersfield, Cal.
La Junia, Colo,, to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.
La Pueblo, Colo,, to Denver, Colo,: Raton, N. Mex., to Las Vegas, N. Mex.
H. Pueblo, Colo,, to Denver, Colo,: Raton, N. Mex., to Las Vegas, N. Mex.
Raton, N. Mex., to Las Vegas, N. Mex.

51393°—S. Doc. 493, 64-1—-5

		ase.	Per cent.			8 8 8 1 1 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1	9.0	9.0		11.9
	Desert.	Increase.	Amount.				\$0.30	.30		.40
	I		1161				£3.65	3.65		3.75
ries.			1909	-			3.35	3.35		3.35
ed territo		se.	Per cent.			10.9		10.2		27.1
Rate per day of 100 miles or less or 10 hours or less in specified territories.	Valley.	Increase.	Amount.			80.30		.30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	08.
or less			11911		:	00		3.25		3.75
) hours	4		1909			69		2.95		2.95
less or 10		ıse.	Per cent.			9.0		9.0 9.2 10.6 9.0		0.4 44 000
00 miles or	Mountain.	Increase.	Amount.			%0.30 30.30 80.30		0,00,00,00,00,00,00,00,00,00,00,00,00,0		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ay of 1	MC		1911			22.55	3	3.05 3.13 3.13 3.05		2.98 3.60 3.40 3.50
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	Plains.	Increase.	Amount.		\$0.30	00	30		.15	
			1161		\$3.25	9. 10	3.30		3.15	00.000
			1909		\$2.95		3.00		3.00	7. 20
rage	ers is).		1911						117	
Average weight on	drivers (tons).		1909						117	· · · · · · · · · · · · · · · · · · ·
	ber.		1161						55	
	Number		1909						70	
				FREIGHT SERVICE—Con. FOUR-CYLINDER COM- POURD LOCOMOTIVES— continued.	Class E3, 00000>—Con. Coal burners— Less than 135,000 pounds on driv- ers!————————————————————————————————————	Door of	Do.7 135,000 pounds or over on drivers <sup>1</sup> Do.2	D0.8 D0.4 D0.6 D0.6 D0.6	Coal Oil burners 1	Do.6 Do.6 Do.6 Do.0

	11.9						1
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	.40		:	:		1 1	
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	3.75	4.00	4.00	4.00			1
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	3.35						-
Tilliani.	::	-	-	-		5.3	-
27.						-	
98	11	:		:		15	1
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<u> </u>	::	:	:	:		:	
3.75	4.00	4.00	4.00	4.00		3.00	
	: :	4	4	-			
2.95						2.85	1
8.7 8.7 11.9	11	-	i	:		1 1	١
32.5 8.7 8.7 11.9			:	:			
92 30 40		-	:	<u>:</u>		<del>: : :</del>	
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2.85							
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<u> </u>	<u>; ;                                   </u>		:	:			
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Coal burners 1 10.2 10.0 10.0 10.0 10.0 10.0 10.0 10.	Mallet, 000000000000000000000000000000000000	00	> (oil) Mallet, 000000-0000	Oo> (oil)	. S. S.	Class C3, OOOoo> (oil) 1 100,000 pounds or over on drivers 6	
	700 000	00	00		S CC	s or (	
burners 1. 20.6 20.8 20.8 20.9	00	0-0	00	:	VO - CYLINDER COM POUND OR CROSS COM POUND LOCOMOTIVES.	nnds rs 6	
Do. 5. Do. 6. Do. 6. Do. 9. Do. 9. Do. 19. Do. Do. 19.	000	00	00	1)	OR C	) por	
E DOUGLA	300	00.	00.	(0)	CYL.	0,00 on d	
3	allet	(oil) Mallet, 00000-00000	> (oil)	00>	TWO - CYLINDER COM- POUND OR CROSS COM- POUND LOCOMOTIVES.	ass 10	
	MM	M	×		1	ਹ	

1 Chicago to Canon City, Colo. (1909); Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex. (1911).

2 Starkville, Colo.; Blossburg and Hebron coal runs.

2 Starkville, Colo.; Blossburg and Hebron coal runs.

3 Fundand and Denver, Colo.; La Junta, Colo., to Raton, N. Mex., Las Vegas, N. Mex., to Albuquerque, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex.

5 Santa Fe District, Lamy, N. Mex., to Santa Fe, N. Mex.

6 Los Angeles and Avalley quivisions; lines south of Barstow, Cal.

7 Albuquerque, N. Mex., to Bakersfield, Cal.

8 La Junta, Colo., to Katon, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.

\* South of Albuquerque.

BELT RY. CO. OF CHICAGO.

DEL	r Kr.	<b>CO.</b> C	FCH	IUAG	0.			
	Nun	aber.	weig!	rage ht on vers ns).	Rate pe 100 mi 10 hours	or day of lles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES,								
Class A3, 000>	68	50	58	64				
Switching:					\$2.50	\$2.75	\$0. 25	10.0
Transfer. Yard. Class A4, 0000>. Switching:		20		100	2. 25	2. 45	. 20	8.9
Switching: Transfer Yard						3. 75		
Class C2, OOoo>	2		31			2. 75		
Transfer					2.50			
Yard					2. 25			
СН	CAGO	& A	LTON	R. R.				
SINGLE-EXPANSION LOCOMOTIVES.								
	4	3	35	36				
Class A2, OO>					<b>\$2.25</b>	\$2,50	\$0.25	11.1
Class A3, OOO> Switching:	45	45	63	63	2. 15	2.40	. 25	11.6
Switching: First-class yards	10	10		00	2, 25	2, 50	. 25	11.1
Second-class yards	67	77	66	67	2. 15	2.40	. 25	11.6
Passenger Freight					2.50 2.90	2.65 3.20	. 15 . 30	6.0 10.3
Switching:					2, 25	2, 50	. 25	11.1
First-class yards Second-class yards Class B4, 0000o>	50	54	92	91	2.15	2.40	. 25	11.6
Freight	47	47	34	35	2.95	3.25	. 30	10. 2
Class C2, OOoo> Passenger Freight					2. 25 2. 57	2.40 2.87	. 15 . 30	6.7 11.6
Class C3, OOOoo> Passenger	24	24	61	61	2.50	2.65	. 15	6.0
Class E4 000000>		30		107	2.90	3.20	. 30	10.3
Freight	9	9	49	49		3.75	••••	
Passenger Freight					2.50 2.90	2.65 3.20	. 15 . 30	6.0 10.3
Class F3, 000000> Passenger	15	25	73	74	2.50	2.65	. 15	6.0
Freight				••••	2.90	3.20	. 30	10. 3
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class E6, oOOOOOOo>		2		143		4.00		
CHICAG	O GR	EAT 1	WEST	ERN	R. R			
SINGLE-EXPANSION LOCOMOTIVES.	1	1		1				
Class A2, 00>	4		31					
Switching. Class A3, OOO>	21	26	51	58	<b>\$2</b> . 25			
Switching					2, 25	\$2.50	\$0.25	11.1

89

\$2.50

\$0.25

# CHICAGO GREAT WESTERN R. R.-Continued.

		7 1501						
	Nun	aber.	weig dri	erage ht on vers ns).	Rate pe 100 mi 10 hours	r day of lles, or s or less.	Iner	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd.					,			
	477	41	0.1					
Class B3, 000o>	47	41	31	44	\$2.25	\$2.50	\$0.25	11.1
Freight	10	47	80	93	2.75	3.05	. 30	10.9
Freight— Consolidation.		-			3, 05	3, 35	. 30	9.8
Switching					2.25	2. 50	. 25	11. 1
Class C2, OOoo> Passenger—	70	51	29	30				
17-inch cylinders					2.30 2.50	2.45 2.65	. 15	6.5
Freight					2.55	2.85 2.50	. 30	11.8
Switching Class C3. OOOoo>	6	37	59	63				
Passenger					2. 65 2. 95	2.80 3.25	. 15	5.7 10.2
Switching.	40	69	66	68		2.50		
Switching Class E3, 00000> Passenger	49				2.65	2.80	.75	5.7
Passenger Freight Class F3, 000000> Passenger		11		61	2.95	3. 25	. 30	10.2
Passenger						2.80		
FOUR-CYLINDER COMPOUND LOCOMO- TIVES,								
Class C3, 00000>	4		60					
Freight. Class E3, 00000>				67	2.95			
Freight Class E6, 000000000>		i		150		3.25		
Freight		13		150		4.00		
TWO-CYLINDER COMPOUND OR CROSS- COMPOUND LOCOMOTIVES.								
(lass B3, 000o>	2		44					
Freight. Class B4, OOOOo>			80		2.75			
Freight					3.05			
Class C3, OOOoo> Freight			60		2.95			
Class E3, oOOOo> Freight			68		2.95			
СНІ	CAGO	JUN	CTIO	N RY.	1			
STACLE EXPLANSION LOCOM THE		1				1		
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>		3		39		\$2.25		
Class A3, 000>		40		64		42.20		

SINGLE-EXPANSION LOCOMOTIVES.				
Class A2, OO>	 3	 39	 	 
Switching.	 	 		
Class A3, 000>	 40	 64	 	 
Switching	 	 	2.25	 
Class B3, OOOo> Switching.	 2	 49	 	 
Switching.	 	 	 2. 25	 
0				

<sup>1</sup> No information prior to 1911.

## CHICAGO, MILWAUKEE & ST. PAUL RY.

	Nun	aber.	weig dri	rage ht on vers ns).	Rate pe 100 mi 10 hours	r day of les, or s or less.	Įner	ease.
•	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	83	69	33	- 32				
First-class yards Second-class yards					\$2.30 2.25	\$2.55 2.50	\$0.25 .25	10.9 11.1
Class A3, OOO>: Oil	117	1 139		46				
Switching-	117	139	57	55	2, 30	2, 55	. 25	10. 9
First-class yards Second-class yards Class B3, 0000> (narrow gauge)	2	3	22	16	2, 25	2,50	. 25	11.1
Freight Class B4, OOOOo>	69	119	78	85	2.50	2.80	. 30	12.0
Class B3, OOO> (narrow gauge). Freight. Class B4, OOOO> Freight. Class C2, OOoo> Passenger Freight.	333	349	27	27	3.00	3.30	.30	10.0
Passenger Freight Class C3, OOOoo>:					2,50 2,50	2.65 2.80	. 15	6. 0 12. 0
OilCoal	271	8 271	49	47 49				
Deggenman oil						2.95		
Fassenger, on Freight, oil— 74,000–88,000 pounds on drivers 141,080 pounds on drivers Passenger, coal Freight, coal—					2, 95	2.95 3.10 3.10	. 15	5. 1
Freight, coal— 74.000-88.000 pounds on drivers					2, 93	3. 10	.30	10. 7
74,000-88,000 pounds on drivers 141,080 pounds on drivers Class E3, 00000>:		1			2.95	3. 25	. 30	10. 2
Oil. Coal.	50	50 50	76	76 76		3. 10		
Oil. Coal. Freight, oil. Freight, coal. Class F3, 000000>	2	22	54	74	2.95	3. 25	.30	10. 2
					2.80	2. 95	. 15	5.4
87,000 pounds on drivers 149,100 and 157,200 pounds on drivers. Class X, freight, Shay geared.	<u>i</u>	····i	50	50	2. 95 2. 50	3. 10 2. 80	. 15	5. 1 12. 0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.	1	1	50	30	2, 90	2. 50	. 50	12.0
Class C3. 00000>	168	168	61	61				
Freight, coal— 74,000-88,000 pounds on drivers 141,080 pounds on drivers Class F2, 00000>					2.80	3. 10	. 30	10.7
Class F2, 00000>	53	53	44	45	2. 95	3, 25	.30	10. 2
					1	2.40	. 10	0.0
CHICAGO	% N	ORTI	I WE	STER	N RY.	1	-	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00> Switching:	47	2	30	32		20 70		
First-class yards Second-class yards Class A3, 000>	200	235	53	55	\$2. 25 2. 15	\$2.50 2.40	\$0. 25 . 25	11. 1 11. 6
Switching: First-class yards	200	400			2. 25	2, 50	. 25	11. 1
Switching: First-class yards Second-class yards Class B3, 0000> Switching: First-class yards	17	16	42	43	2. 15	2. 40	. 25	11, 6
Switching: First-class yards Second-class yards Freight					0.15	2, 50		•••••
The sale					2.15 2.80	2.80	.00	0.0

#### CHICAGO & NORTH WESTERN RY .- Continued.

Num	ıber.	weig dri	nt on vers	100 mi	les, or	Incr	ease.
1909	1911	1909	1911	1909	1911	Amount.	l'er cent.
	141		104		§3. 75		
	2	• • • • • •	28	4 00 70			
				2. 55	2. 85	. 30	6.0
386	365	30	30	2.60	2. 90 2. 80	.30	11.5
	000			2. 75 2. 75	3. 10 3. 15	.35	12. 7 14. 5
				2. 25 2. 15	2. 50 2. 40	. 25 . 25	11. 1 11. 6
	4		51	••••••	2, 80		
				2. 65 2. 65 2. 65 2. 90	2. 80 2. 80 2. 80 3. 05	. 15 . 15 . 15 . 15	5. 7 5. 7 5. 7 5. 2
				2.90		.30	
706	702	57	57	2.80 2.80 3.00 3.00	3. 10 3. 10 3. 30 3. 30	.30 .30 .30 .30	10. 7 10. 7 10. 7 10. 0 10. 0
				3. 05 3. 05 3. 15 3. 15	3. 35 3. 35 3. 55 3. 55	.30 .30 .40 .40	9, 8 9, 8 12, 7 12, 7
				2. 25 2. 15	2. 50 2. 40	. 25	11.1 11.6
5	3	27	27 27				
91	01	45	46	2. 80	3. 10	. 30	5. 4 10. 7
1	81	55	69	2.65	2, 80	.15	5. 7
			• • • • •	3.00		. 30	10.0
					3. 05 3. 55		
!			PACI	FIC RY	7.	1	
10	10	34	34	\$2.40	\$2.70	\$0.30	12.5
8	7	56	56				
157	166	60	60	2. 25 2. 15	2.50 2.40	. 25 . 25	11. 1 11. 6
	909 3386 706 5 11	706 702 2 386 365 365 365 365 365 365 365 365 365 36	Number.   weight of the control of t	1910   1911   1909   1911   1909   1911   1909   1911   1909   1911   1909   1911   1909   1911   1909   1911   1909   1911   1909   1911   1909   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911   1911	Number.   weight on drivers   100 mi   100 mi	Number.   weight on drivers (tons).   100 miles, or 100 hours or less.   100 miles, or 100 hours or 100 hours or less.   100 miles, or 100 hours or less.   100 miles, or 100 hours or 100 ho	Number.   weight on drivers (tons).   100 miles, or 10 hours or less.   Increase   100 miles, or 10 hours or less.   100 miles, or 10 hours or 10 hours or less.   100 miles, or 10 hours or 10 hour

## CHICAGO, ROCK ISLAND & PACIFIC RY .- Continued.

							,	
	Nun	nber.	weig dri	rage ht on vers ns).	100 m	or day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.								
Class B3, OOOo>	54	54	44	44	\$2.70	\$2.85	\$0.15	5, 6
Freight— Through Local					2. 70 2. 90	3.00 3.25	.30	11. 1 12. 1
Switching— First-class yard Second-class yards	1		ì		2. 25 2. 15	2.50 2.40	. 25	11. 1 11. 6
Class B4, OOOOo>:	17 321	1	93 83	94 86				
Coal	321	446	53	80		• • • • • • •		••••••
Oil Coal <b>20</b> and 21 inch cylinders—local freight—	• • • • • • • • • • • • • • • • • • • •				3. 05 3. 05	3. 20 3. 35	. 15 . 30	4. 9 9. 8
Oil Coal					3. 25 3. 25	3.45 3.60	. 20 . 35	6.5 10.8
22 and 23 inch cylinders—through freight— Oil.					3.30	3. 45	. 15	4.5
Coal			•••••	• • • • • •	3, 30	3.60	. 30	9.1
Oil. Coal. 24-inch cylinders and over—through					3, 50 3, 50	3.70 3.85	. 20 . 35	5. 7 10. 0
freight— Oil						3.60		
Coal					*******	3.75		
Oil. Coal. Switching—	• • • • • •					3.85 4.00		
First-class yards Second-class yards					2.35 2.25			
Class C2, 0000>: Oil	338	3 320	34 29	37 30				
Passenger— 18-inch cylinders and under 19-inch cylinders					2.50 2.60	2. 65 2. 75	. 15 . 15	6. 0 5. 8
Freight— 18-inch cylinders and under—								
through— Oil. Coal					2.55 2.55	2. 70 2. 85	. 15 . 30	5. 9 11. 8
local— Oil					2. 75	2. 95	. 20	7.3
Coal 19-inch cylinders—through—					2.75	3. 10 2. 75	. 35	12. 7 5. 8
Coal 19-inch cylinders—local— Oil Coal					2.60	2.90 3.00	. 30	11.5 7.1
Switching—					2, 80	3. 15	. 35	12.5
First class yards Second-class yards Class C3, OOOoo>:	1				2. 25 2. 15	2. 40 2. 40	. 15 . 25	6. 7 11. 6
Coal	19 328	19 347	59 60	59 60			•••••	
19 to 21 inch cylinders (with trailer, Atlantic)					2. 70	2.85	. 15	5.6
trailer, Pacific)		l	l		2.95	3. 10	. 15	5.1

#### CHICAGO, ROCK ISLAND & PACIFIC RY .- Continued.

	,						,	
	Nun	nber.	weig	rage ht on vers ns).	Rate pe 100 mi 10 hours	les, or	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.								
Class C3, OOOoo>—Continued. Freight— 18 and 19 inch cylinders—								
through— Oil. Coal. 18 and 19 inch cylinders—					\$2.80 2.80	\$2.95 3.10	<b>\$0.15</b>	5.4 10.7
local— Oil. Coal. 20 to 23 inch cylinders (with					3. 00 3. 00	3. 20 3. 35	. 20 . 35	6.7 11.7
trailer, Pacific)—through—Oil					3. 00 3. 00	3. 15 3. 30	.15	5. 0 10. 0
20 to 23 inch cylinders (with trailer, Pacific)—local— Oil					3. 20 3. 20	3.40 3.55	. 20	6.3 10.9
Switching—  18-inch cylinders and under  19 and 20 inch cylinders  21-inch cylinders and over					2. 15 2. 25 2. 35	2.40 2.50 2.60	. 25 . 25 . 25	11.6 11.1 10.6
Class F2, 00000> Passenger Class F3, 00000>				49	2.70	2.85	. 15	5.6
Passenger					2.95	3.10	. 15	5.1
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class B4, OOOOo>	12		70		3. 05			
20 and 21 inch cylinders—local freight—					3. 25			
Class F2, 00000>			53	53	2.70	2.85	. 15	5.6
			1	1	1	1	1	

## CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RY.

SINGLE-EXPANSION LOCOMOTIVES.								
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	12	6	30	30				
Switching					\$2, 25	\$2.50	\$0, 25	11.1
Class A3, 000>	33	36	50	51			00.20	
Switching—								
Under 18-inch cylinders					2. 25	2.50	. 25	11.1
18-inch cylinders and over					2.30	2.55	. 25	10.9
Class B4,*00000>	9	9	74	74				
Freight, 22-inch cylinders					3.00	3.30	. 30	10.0
Class C2, O Ooo>	142	122	28	29	0.50	2, 65	17	
Freight—					2.50	2.00	. 15	6.0
Under 18-inch cylinders				•	2.55	2, 85	.30	11.8
18 to 21 inch cylinders.		2			2.60	2, 90	.30	11.5
Class C3, 00000>		140	57	60	2.00	2.00	.00	22.0
Passenger—		110						
18 and 19 inch cylinders					2.65	2.80	. 15	5.7
_ 20-inch cylinders					2.90	3.05	. 15	5.2
Freight—								
Under 18-inch cylinders					2.55	2.85	.30	11.8
18 and 19 inch cylinders					2.80	3.10	.30	10.7
20 and 21 inch cylinders	7	7	46	46	3.00	3.30	. 30	10.0
Passenger, 20-inch cylinders		1	40	40	2.65	2, 80	. 15	5.7
Class F3, 000000>	12	17	62	67	2,00	2.00	. 13	J. 8
Passenger, 21-inch cylinders	12	1	02		2.90	3.05	. 15	5.2
		1			2.00	3.00		

## CHICAGO TERMINAL TRANSFER R.R.

	Nun	ıber.	weig	vers	Rate pe 100 mi 10 hours	r day of les, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	4	4	38	38	90.05	90.70		
Switching Class A3, OOO>	16	15	49	49	\$2.25	\$2.50	\$0.25	11.1
Switching. Class B2, OOo>	3	3	30	30	2. 25	2.50	. 25	11.1
Passenger					2. 25	2.40	. 15	. 11.1
Class B3, OOOo> Switching.		8	63	53	2. 25	2.50	. 25	11, 1
Class B4, 00000>	6	6	85	85				
Switching. Class C2, OOoo>		1	28	28	2.50	2.75	. 25	10.0
Passenger					2.25	2.40	. 15	6.7
Class E4, oÖOOOo> Switching		4	60	60	2. 25	2.50	. 25	10.0
~ // I/CIAMB.					2.20	2.00	. 20	10.0

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	1		45					
Switching					\$2.25			
Class B3, 0000>	3	3	68	68				
Switching					2. 25	\$2,50	\$0. 25	11.1
Class E3, 00000>	3	3	65	66	2,20	42.00	401.00	
Passenger					2.80	2.95	. 15	5.4
								011

## COLORADO & SOUTHERN RY.

SINGLE-EXPANSION LOCOMOTIVES.					-			
Class A3 OOO>	24	28	57	59				
Switching					\$2. 25	\$2.50	<b>\$</b> 0. 25	11.
Class B3 OOŌo>		15	33	33	2.25	2, 40	. 15	6.
Passenger Freight					2.60	2. 90	.30	11. 5
Class B4 00000>	112	112	64	64				
Freight—	-							
18 by 24 inch cylinders					2.89	3.19	.30	10.
21 by 28 inch cylinders					3. 25 3. 35	3.55 3.65	.30	9.5
Narrow gauge	1				2, 71	3.07	.36	13.
Class C2 OOoo>		5	29	30				2012
Passenger—		}						
17 by 24 inch cylinders					2.25	2.40	. 15	6. 7
18 by 24 inch cylinders Class C3 O O O oo >	24	24	59	59	2.50	2.65	. 15	. 6.0
Passenger—	24	21	00	09				
17 by 24 inch cylinders					2.25	2.40	. 15	6.7
20 by 24 inch cylinders					2.50	2.65	. 15	6. (
FOUR-CYLINDER COMPOUND LOCOMOTIVES.			-					
Class B4 00000>	12	12	89	89				
Freight, 22 by 28 inch cylinders					3.35	3.65	0.30	9.0
	1			1				

# DAVENPORT, ROCK ISLAND & NORTHWESTERN RY.

	Nun	aber.	weigh	weight on		r day of iles, or s or less.	Increase.	
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	2	3	32	32				· · · · · · · · · · · · · · · · · · ·
Switching. Class A3, OOO>	3	5	38	38	\$2.25	\$2.50	\$0.25	11.1
Switching					2.25	2.50	. 25	11.1
Class C2, OOoo>	2	1	26	26	2,50	2.65	.15	6,0
WOLK CLAIM					2.00	2.00	. 10	0.0

## DULUTH, SOUTH SHORE & ATLANTIC RY.

		1	1					
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	3	3	28	28				
Switching.					\$2.15	\$2.40	\$0.25	11.6
Class A3, 000>				37				
Switching. Class A4, 0000>			95		2. 15	2.40	. 25	11.6
Switching.								
Class B3, 0000>	33	33	40					
Freight					2.70	3.00	.30	11.1
Class B4, 00000>				76				
Freight				26	2.95	3. 25	. 30	10.2
Class C2, OOoo> Passenger			. 26	26	2.50	2.65	. 15	6.0
Class C3, OOOoo>			49	50	2.00	2.00	. 13	0.0
Passenger					2.50	2.65	. 15	6.0

#### EL PASO & SOUTHWESTERN SYSTEM.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	17	17	107	72	\$3,00	\$3, 25	\$0, 25	8,3
Class B3, 000o>	1	1	30	30				
Mixed Class B4, 0000o>					4. 17	4. 47	. 30	7.2
Oil		2		63	}			
Coal	96	93	83	84	]			
Freight			• • • • • •		3.30 3.30	3. 82 3. 75	. 52	15.8 13.6
Switching					3.00	3. 25	. 25	8.3
Class B5, 000000> Freight		3	100	100	3, 45	3, 95	.50	14.5
Class C3, 00000>		15	58	60	5.40	3, 95	. 50	14. 5
Passenger					2.75	3.00	. 25	9. 1
MixedClass E3, 00000>		6	63	63	3.30	3. 75	. 45	13.6
Passenger					2.75	3.00	. 25	9. 1
Class E4, 000000>	1	- 1	68	68	3, 00	3. 25		8,3
Class F3, 000000>	16	16	74	75	3.00	0. 40	. 20	0.0
Passenger					2, 75	3.00	. 25	9. 1
Freight						3. 75		
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class B4, 00000>	1	1	48	48	4.17	4, 47	,30	7. 2
		1						

	Number.		Average weight on drivers (tons).		Rate per day of 100 miles, or 10 hours or less.		Increase.	
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES. Class A3, 000>	10	12	68	69				•••••
Fort Worth. Other yards. Class B3, OOOo>.			39	39	\$2. 25 2. 15	\$2,50 2,50	\$0. 25 . 35	11. 1 16. 3
Freight:			81	81	2. 80 3. 00	3. 10 3. 30	.30	10. 7 10. 0
Freight: 20-inch cylinders— Through Local					3. 10 3. 30	3, 40 3, 60	.30	9. 7 9. 1
22-inch cylinders— Through Local Class C2, OOoo>				29	3.30 3.50	3.60 3.80	.30	9, 1 8, 6
Passenger Class C3, 00000> Passenger Class F3, 00000>	13	'   13	66	66	2.35 2.55	2, 50 2, 70	.15	6. 4 5. 9
Class F3, 000000> Passenger		5		77		3.75		

#### GREAT NORTHERN RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	87	99	60	61				
Switching—	01	99	00	0.1				
First-class yards	ŀ				\$2, 25	\$2,50	\$0.25	11.1
Second-class yards	1				2. 15	2.40	. 25	11.6
Class A4 <0000> (electric)	1	1	114	113	2.10	2. 30	. 20	11.0
Holmon	*	4	114		3.00	3,30	.30	10.0
HelperClass B3, OOOo>	117	117	48	47	3.00	0.00	. 50	10.0
Freight—	111	117	40	41				
18 by 24 inch cylinders					2.80	3.10	.30	10.7
All others					3.10	3.30	. 20	6.5
All others					3.10	3.30	. 20	0.0
Switching— First-class yards					0.05	0.50	0"	
First-class yards					2. 25	2.50	. 25	11.1
Second-class yards					2.15	2.40	. 25	11.6
Class B4, 0000o>:	1							
Oil		3		90				
Coal	255	251	82	82				
Freight-		1		1				
Öil					3.25	3.40	. 15	4.6
Coal					3.25	3.55	. 30	9.2
Class C2, O O 00>								
Passenger					2.40	2.55	. 15	6.3
Freight					2.65	2.95	.30	11.3
Class C3, O'O Ooo>:	1							
Oil		5		65				
Coal	83	131	58	64				
Passenger—	1 -							
18 by 24 inch cylinders	1				2.70	2.85	. 15	5.6
All others					2.90	3.00	.10	3.4
Freight-								
18 by 24 inch cylinders					2, 80	3.10	.30	10.7
19 by 24 inch cylinders 20 by 30 inch cylinders						3,30		
20 by 30 inch cylinders					3. 25	3.55	.30	9. 2
23½ by 30 inch cylinders					0.20	3.75		
23½ by 30 inch cylinders 20 by 24 inch cylinders					3.00			
Class C4 0000000>					0.00			
Oil		13		71				
Coal	102	88	73	73				
Freight—	102	00	10	10				
Oil					3, 25	3,40	. 15	4, 6
Coal					3, 25	3, 55	.30	9. 2
Coal (superheater)	1				3. 20	3.75	. 50	0.2
Coal (superheater)	125	195	70	75		0.70		
Freight	199	150	10	10	3. 25	3.55	.30	9. 2
Freight (gyperheater)					5.25	3.75	. 50	9.2
Freight (superheater)	61	64	75	76		ð. 75		
Class F3, 0000o> Passenger	01	01	75	70	2.90	3.05	. 15	5. 2
Passenger					2.90	3.00	. 19	5. 2

GREAT 1	NORT	HERN	N RY.	-Cont	inued.			
	Number.		weig	rage ht on vers ns).	100 mi	er day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class E6, 00000000>:		3		158				
Coal	67	64	136	135	\$2.15	\$4.00	\$0.55	15.9
Class F2, 00000>	10	10	56	50	2.90		.15	5. 2
Freight. Class F2, 00000> Passenger Class B7, 00000000> (Mallet). Freight.		36		175	2.00			0.2
						1.00		
HOUSTON	V EAS	T & V	WEST	TEX.	AS RY.			
SINGLE-EXPANSION LOCOMOTIVES.								
Class C2, OOoo> (Oil)		2	32	32				
Passenger. Class C3, OOOoo>: Oil.	12	14	47	45	\$2.50	\$2,65	\$0.15	6.0
CoalFreight—		1	33	34				
Oil					2. 62 2. 62	2. 77 2. 92	. 15	5. 7 11. 5
HOUSTO	ON &	TEXA	S CE	NTRA	LR.R.			
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	1	1	30	30				
Switching— First-class yards					\$2.25	\$2.50	\$0.25	11.1
Second-class yards	16	16	57	57	2.15	2.40	.25	11.6
Switching— First-class yards					2. 25 2. 15	2.50 2.40	25	11. 1 11. 6
Second-class yards Class B3, OOOo> (Oil) Freight.	13	13	63	63	2. 13	2. 40	.15	5. 6
Class C2, OO00>: Oil		22	32	35	2.70	2,00	.10	3.0
Coal Passenger		4		27	2, 50	2, 65	. 15	6. 0
Class C3, OOOoo>:	22	22	44	45				
Coal	36	36	44	43				
Öil					2.70 2.70	2. 85 3. 00	. 15	5. 6 11. 1
Switching— First-class yards					2. 25			
Second-class yards					2. 15			

#### INTERNATIONAL & GREAT NORTHERN R.R.

	Number.		Average weight on drivers (tons).		Rate per day of 100 miles, or 10 hours or less.		Increase.	
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, OOO> (oil)		1		66				
Switching		1		1				
First-class yards						2.40		• • • • • • • • • • • • • • • • • • • •
Class C2, OO00>:     Oil	5 31	13	30 31	30 29				
Under 18-inch cylinders					\$2.25	2.40	<b>\$0.15</b>	6.7
18-inch cylinders and over Passenger, coal burners—					2.50	2.65	. 15	6.0
Under 18-inch cylinders					2.25	2.40	. 15	6.7
18-inch cylinders and over Freight, oil burners—					2.50	2.65	. 15	6.0
Through					2.70	2.85	. 15	5, 6
Local					3.05	3.20	. 15	4.9
Freight, coal burners— Through					2,70	3.00	.30	11.1
Local						3.35	.30	9.8
Switching— First-class yards					2, 25	2, 50	. 25	
Second-class yards					2. 25	2. 50	. 25	11. 1 11. 6
Clare C2 000000								
Oil	37 81	86	53 55	57 52			•••••	
Passenger, oil and coal					2.50	2.65	. 15	6.0
18-inch cylinders or under 19-inch cylinders—	• • • • • •				• • • • • • • • • • • • • • • • • • • •	2.85		•••••
Through					2.85	3.00	. 15	5.3
Local 20-inch cylinders and over— Through Local					3.05	3. 20	,15	4.9
Through					3,05	3, 20	. 15	4.9
Local					3.25	3.40	. 15	4.6
Freight, coal burners—								
18-inch cylinders or under					2.70	3.00	.30	11.1
19-men cymaers					2.85	3.15	.30	10.5
Local— 19-inch cylinders or under					3.05	3.35	.30	9.8
Through	•••••				3.05	3.35	. 30	9.8 9. <b>2</b>
Switching					3. 25	3. 55	. 30	9. 2
First-class yards					2. 25	2.50	. 25	11.1
Second-class yards					2.15	2.40	. 25	11.6

# KANSAS CITY SOUTHERN RY.

SINGLE-EXPANSION LOCOMOTIVES.		1	ł	1	1	1		1	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SINGLE-EXPANSION LOCOMOTIVES.								
Coal.         34         19         59         56         Second-class yard         \$2.25         \$2.50         \$0.25         11.1           Second-class yard         2.15         2.40         .25         11.6           Class B3, OOOo>:         2         50             Coal.         8         2         48         50             Through freight, oil         2.60         2.75         15         5.8           Local freight, oil         2.85         3.00         15         5.3           Through freight, oal         2.60         2.90         30         11.5			15		==				
Switching—     \$2.25     \$2.50     \$0.25     \$11.1       Second-class yard     2.15     2.40     .25     \$11.6       Class B3, OOOo>:     2     50          Coal     8     2     48     50         5.8       Local freight, oil     2.85     3.00       5.8       Local freight, eoal     2.60     2.90      30     115     5.3       Through freight, coal     2.60     2.90      30     11,5									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		. 34	19	59	96				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Switching—	1		}	į ,				
Second-class yard   2.15   2.40   .25   11.6					1	\$2.25	\$2.50	\$0.25	11 1
Class B3, OOOo>:     2     50       Oil.     8     2     48     50       Coal.     8     2     48     50       Through freight, oil     2.60     2.75     15     5.8       Local freight, oil     2.85     3.00     15     5.3       Through freight, coal     2.60     2.90     30     11.5									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Second-class yard					2.10	2.40	. 25	11.0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Class B3, 0000>:	1	1						
Coal.         8         2         48         50			2		50				
Through freight, oil         2.60         2.75         15         5.8           Local freight, oil         2.85         3.00         15         5.3           Through freight, coal         2.60         2.90         30         11.5				48					
Local freight, oil         2.85         3.00         .15         5.3           Through freight, coal         2.60         2.90         .30         11.5	Coal								
Through freight, coal	Through freight, oil								
Through freight, coal	Local freight oil					2.85	3,00	. 15	5. 3
						2 60	2 00		11 5
	I III ough neight, coal								
Local freight coal 2.85 3.15 30 10.5	Local freight, coal					2.85	3. 15	. 30	10. 5

## KANSAS CITY SOUTHERN RY .- Continued.

Average

	Nur	nber.	weig dri	ht on vers ns).	Rate pe 100 m 10 hours	r day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.	:							
Class B4, 00000>;		-						
Oil	67	28 39	88	88 88			• • • • • • • • •	
Freight, oil					\$2.91	\$3.06	\$0.15	5. 2
Freight, coal— 21 by 30 inch cylinders					3.05	3.35	. 30	9.8
22 by 28 inch cylinders					3. 10	3.40	. 30	9.7
22 by 38 inch cylinders. 22 by 30 inch cylinders. Class C2, OOoo> (oil).	21.	9	30	34	3. 15	3. 45	. 30	9. 5
Passenger:					2.25	2.40	15	c 7
Less than 18-inch cylinders 18-inch cylinders and over					2. 50	2.65	. 15 . 15	6.7 6.0
Class C3, OOOoo>:		44		54				
Oil. Coal	77	9	51	53				
Oil, 19-inch cylinders and under— Through freight					2.75	2.90	. 15	5. 5
Local freight					2.85	3.00	. 15	5. 3
Coal, freight— 19-inch cylinders and under—						İ		
Through freight					2.75	3.05	. 30	10.9
Local freight					2.85	3. 15	. 30	10.5
Through freight					2.90	3.20	. 30	10.3
Local freight					3.00	3. 30	. 30	10.0
Oil					2.50 2.50	2.65 2.65	. 15 . 15	6.0
Coal	····i	1	29	29			. 10	6.0
Passenger					2.25	2.40	. 15	6.7
MINNE ADOLIC CO.	DAT	TT &	SATE	וייי פייו	PIC MEA	DIE DX		
MINNEAPOLIS, ST.	, IAC	) 11 Oc	DA O	01 01	LE, MA	MIE IVI	•	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	1	9	35	37				
Switching— First-class yard					\$2.00	\$2.50	\$0.50	25.0
Second-class yard	16	39	58	56	1.95	2.40	. 45	23. 1
Class A3, OOO>	10	99	00	90			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •
First-class vard			• • • • • •		2.00 1.95	$\begin{bmatrix} 2.50 \\ 2.40 \end{bmatrix}$	. 50	25.0
Second-class yard	16	37	43	44	1. 90	2.40		23. 1
Freight— Chicago division					2.50	3. 10	. 60	0.4: 0
All other divisions					2.50	3.05	. 55	24: 0 22: 0
Class B4, 00000>		50	• • • • • •	85	• • • • • • •	• • • • • • •		
Chicago division						3.20		
All other divisions	39	81	30	29		3.20		
Passenger—					0.05	2, 40	0."	0.1
Chicago division All other divisions. Class C3, OOOoo>					2.35 2.35	2.40	.05	2.1
	7	62	60	56				
Passenger— Chicago division					2.55	2.80	.25	9.8
All other divisions		15		44	2.55	3. 10	. 55	21.6
Freight						2.90		
Class F3, oOOOoo>	27	45	64	70	• • • • • • • •		• • • • • • • • • • • • • • • • • • • •	
Chicago division					2.55	2.65	. 10	3.9
All other divisions					2.55	2.85	.30	11.8
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								-
Class B5, 000000>	1	1	93	93				
Freight. Class E4, 000000>	····i		64	64	2.90	3.45	. 55	19.0
Freight	1	1		0.2	2.65	3. 20	. 55	20.8

## MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RY .- Continued.

								/		
	Nun	mber.	weigh	erage ght on ivers ons).	100 mi	er day of illes, or es or less.		rease.		
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.		
TWO-CYLINDER COMPOUND OR CROSS- COMPOUND LOCOMOTIVES.										
Class B3, OOOo> Freight— Chicago division All other divisions	65	65	63	63	\$2.50	\$3.20	\$0.70	28.0		
Class B4, 0000o> Freight—	72	78	73	74	2.50	3.20	.70	28.0		
Chicago division					2.65 2.85	3. 30 3. 40 3. 75	. 65	24.5 19.3		
Class C3, OOOoo>	. 5	5	48	48	2.55	2.85	.30	11.8		
Chicago division. All other divisions Class E3, 0000> Freight	10	10	65	65	2. 55	3.20	. 30	20.8		
MINNESOTA TRANSFER RY.										
SINGLE-EXPANSION LOCOMOTIVES.										
Class A2, OO> Switching Class A3, OOO>	7	6	36	37	\$2.25	\$2,50	\$0.25	11.1		
Switching.  Switching.		2	58	58	2.25	2.50	.25	11.1		
MISSOU	ы К	ANSA	C & 7	DEXA		-				
SINGLE-EXPANSION LOCOMOTIVES.	K1,	AIN	5 4	Ezz	5 101.					
Class A2, OO>	. 3	2	27	28						
First-class yardsSecond-class yards	18	28	66	69	\$2.25 2.15	\$2.50 2.40	\$0. 25 . 25	11.1		
Switching— First-class yards Second-class yards		276	57	59	2. 25 2. 15	2.50 2.40	. 25	11. 1 11. 6		
Class B3, OOOo>. Freight— 19-inch cylinders and under Over 19-inch cylinders		210			2. 80 2. 90	3. 10 3. 20	.30	10.7		
Class B4, OOOOo> Freight— 20 by 26 inch cylinders	35	74	73	86	2, 95	3. 25	.30	10.2		
21 by 26 inch cylinders	58	37	26	28	3. 00 3. 10	3. 30 3. 40	.30	10.0		
Passenger— Under 18-inch cylinders 18-inch cylinders and over Class C3, OOOoo>					2. 25 2. 50	2. 40 2. 65	. 15	6. 7 6. 0		
Passenger, 18-inch cylinders and over.	7	73	36	57 36	2, 50	2. 65	. 15	6, 0		
Passenger, 18-inch cylinders and over. Class F3, 000000> Passenger		10		70	2.00	2.65				
**TOUR-CYLINDER COMPOUND LOCOMOTIVES.  Class C3, OOOoo>	2	2	69	61						
Passenger, 18-inch cylinders and over.					2.50	2.65	. 15	6.0		

MISSOURI PACIFIC RY.

	Number.		Number.		Average weight on drivers (tons).		Rate per day of 100 miles, or 10 hours or less.		Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES.										
Class A3, 000>		56	65	69	\$2, 25	\$2,50	\$0, 25	11.1		
Class B3, 0000>	86			41	2, 80	3, 10				
Through (reight Local freight					3.00		.30	10. 7 10. 0		
Class B4, OOOOo>		1		80				*******		
22 by 30 inch cylinders					3. 25 3. 05	3, 55 3, 35	.30	9. 2 9. 8		
· 20 by 24 inch cylinders Local freight—	1				2.90	3, 20	.30	10.3		
22 by 30 inch cylinders					3, 45	3.75 3.55	. 30′	8. 7 9. 2		
20 by 24 inch cylinders	55	47	38	40	3.10	3. 40	. 30	9. 7		
Passenger— Cylinders under 18 inches					2, 25	2, 40	. 15	6, 7		
18 inches and over				55	2. 50	2. 65	.15	6.0		
Through freight—  193 by 28 inch cylinders					3, 05	3, 35	. 30	9. 8		
20 by 24 inch cylinders 19 by 24 inch cylinders					2, 90	3, 20 3, 10	. 30	10.3		
Local freight-							. 30	10.7		
19½ by 28 inch cylinders					3. 25 3. 10	3, 55 3, 40	.30	9. 2 9. 7		
19 by 24 inch cylinders				1		3, 30	.30	10.0		
20 by 24 inch cylinders					2, 65 2, 50	2. 80 2. 65	.15	5. 7 6. 0		
Class F2, 00 000> Passenger					2.65	2. 80	.15	5. 7		
Class F3, 000000> Passenger	9	29		72	2.65	2. 80		5. 7		
	1	i								

## NORTHERN PACIFIC RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	2	1	32	29				
Switching					\$2.25	\$2.25	\$0.00	0.0
Class A3, 000>:				-			1	
Oil		10		61				
Coal	183	194	59	60	0.05			
Switching. Class A4, 0000>	9	9	69	69	2. 25	2. 25	.00	0
Switching.	9	9	09	09	2, 25	2. 25	.00	.0
Class B3. 0000>	122	120	43	43	2, 20	2, 20	.00	.0
Freight-			10	-0				
100,000 pounds or more on drivers.					3.00	3.00	.00	.0
Less than 100,000 pounds on								
drivers					2, 80	2, 80	.00	.0
Class B4, 00000>		75	72	72				
Freight	2	2	66	66	3. 25	3, 25	.00	.0
Freight.	2	4	00		3, 25	3, 25	.00	
Class C2, OOoo>	107	98	36	29	0, 20	0. 20	.00	.0
Passenger—	201		30	20				
Engines with 18-inch cylinders					2, 50	2, 50	-00	.0
Engines with 17-inch cylinders or								
under					2, 35	2.35	.00	.0

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NORTHERN PACIFIC RY .- Continued.

	1							
	Nur	nber.	weig dri	erage ht on vers ns).	100 m	er day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.								
Class C3, OOOoo>:				47				
Oil. Coal.	102	104	46	47 48				
Oil burners, passinger— 100,000 pounds or more on drivers.						\$2,90		
Less than 100,000 pounds on					•			***************************************
drivers Coal burners, passenger—						2, 70		• • • • • • • • • • • • • • • • • • • •
100,000 pounds or more on drivers. Less than 100,000 pounds on				:	\$2.90	2.90	\$0.00	0.0
drivers					2.70	2.70	.00	.0
Coal burners, freight— 100,000 pounds or more on drivers. Less than 100,000 pounds on					3.00	3.00	.00	.0
					2, 80	2, 80	.00	.0
Class D2, 000> Switching Class E3, 0000> Freight Class E4, 00000> Freight Class F2, 00000>	1	1	17	17				.0
Class E3, oOOOo>	150	150	77	77	2, 25	2, 25	.00	
Freight.	160	203	101	102	3.05	3, 05	.00	.0
Freight	6	6	44	44	3.35	3.35	.00	.0
Da					2.90	2.90	.00	.0
Class F3, 0OO000> Passenger Class geared, OOO000>	78	142	71	71	2.90	2.90	.00	.0
Class geared, OOOOoo>	1	1	86	86	3.00	3.00	.00	.0
Class geared, OOOO>	3	3	56	56				
Freight					3.00	3.00	.00	.0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class B4, 00000>	42	42	86	89				
Freight Class C3, OOOoo> Coal burners, freight—	40	36	72	72	3. 25	3. 25	.00	.0
Coal burners, freight—					3.00	3,00	.00	.0
100,000 pounds or more on drivers. Class E4, 000000>	20	17	104	103				
Class E6. 00000000>		22	158	151	3. 35	3.35	.00	.0
FreightClass E8, 00000000000>		5		202	3.55	3. 55	.00	.0
Freight Class F3, 000000>						3. 55		
Passenger	2		79		2.90			
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.				:				
Class B3, OOOo>	20	19	54	54				
Fraight		10	01	01	2.00	0.00		
100,000 pounds or more on drivers. Class B4, OOOOo>	26	26	84	84	3: 00	3.00	.00	0
Freight. Class C3, OOOoo>:					3. 25	3. 25	.00	.0
Oil Coal		3		58				
Oil burners, passenger—		140	65	66	•••••			
100,000 pounds or more on drivers. Coal burners, passenger—						2, 90	• • • • • • • • • • • • • • • • • • • •	
100,000 pounds or more on drivers.					2. 90	2. 90	.00	.0
Coal burners, freight— 100,000 pounds or more on drivers.					3.00	3.00	.00	.0
Class C4, OOOÔoo> Freight	4	4	75	75	3. 25	3. 25	.00	.0
T.1018H0					0.20	0.20	.00	.0

#### OREGON RAILROAD & NAVIGATION CO.1

	Nun	nber.	weig dri	erage ht on vers ns).	100 m	er day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00	1		32		\$2.25			
Switching					Φ2. ZU			
OilCoal	6 11	6 24	65 67	65 67				
Switching	1	1	9	8	2. 25	\$2.50	\$0.25	11.1
( lass B2, 0000					2. 25	2.50	. 25	11.1
(lass B3, 0000>: Oil	3	5	48	36				
Coal. Switching.	11	12	45	42	2. 25	2.50		11.1
Freight-								
Oil burners. Coal burners.					2. 75 2. 75	3.15 3.30	. 40	14.5 20.0
Class B4, 00000>:	2	7	65	80				
Coal	48	53	88	86				*********
Freight— Oil burners—								
117,000 pounds on drivers 149,000 to 197,000 pounds on					3.05	3. 20	. 15	4.9
drivers					3.05	3.30	. 25	8.2
117.000 pounds on drivers 149,000 to 187,000 pounds on					3.05	3.35	.30	9.8
149,000 to 187,000 pounds on drivers					3.05	3.45	. 40	13.1
Class C2, OO00 :	2	4	31	23				
Oil. Coal.	27	28	28	28				
Freight— Oil					2.65	2.80	. 15	5.7
Class C3, OOOoo					2.65	2.95	. 30	11.3
Oil	9	10	50	48				
Coal Switching	42	56	55	60	2. 25	2.50	. 25	11.1
Freight— Oil burners—								
71,000 pounds on drivers					2.75	2.90	. 15	5.5
119,000 to 126,000 pounds on drivers					2.90	3.05	. 15	5.2
Coal burners— 71,000 pounds on drivers					2.75	3.05	.30	- 10.9
119,000 to 126,000 pounds on drivers					2.90	3.20	.30	10.3
Paggangar	i				2.30			10.5
113,000 pounds on drivers						2.80 2.95		
92,000 pounds on drivers 113,000 pounds on drivers Class E4,00000 Freight		41		102		3, 45		
Class 12, 00000>;				50		0.10		
OilCoal		15 15		53 53				
Coal Passenger Class F3, 000000>:					• • • • • • • •	2.95		
Oil	T	11 16	62 67	73 72				
Passenger					2.80	2.95	. 15	5.4
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class B4, 00000>:								
Oil. Coal.	6 19	12 16	90 88	88 87				
Freight-	10	10	00	01				
0il					3.05	3.30	. 25	8.2
Coal.					3.05	3.45	. 40	13.1

<sup>1</sup> Name changed Dec. 24, 1910, to Oregon-Washington Railroad & Navigation Co.

#### OREGON RAILROAD & NAVIGATION CO .- Continued.

	Number.		weig dri	erage ht on vers ns).	Rate per day of 100 miles, or 10 hours or less.		Increase.	
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMO- TIVES—continued.								
Oil. Coal. Passenger	5	1 5	69 69	69 69	\$2.80	\$2.95	\$0.15	5.4
Class F3, oOOOoo>:	4	4	69	69				
· Coal		4		69	2.80	2.95	. 15	5.4
Class E8, 00000-00000> Freight		3		197		4.00		

#### OREGON SHORT LINE R. R.

		,	,			,		
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	36	36	69	69				
Switching—	30	30	03	0.5				***********
100,800 to 140,000 pounds on								
drivers					\$2.25	\$2.50	\$0.25	11.1
150,000 pounds on drivers					2.35	2.60	. 25	10.6
Class B4, 000000>	71	73	92	92				
Switching						2.50		
Freight—								
154,000 pounds on drivers					2.90	2.90	.00	.0
165,300 pounds on drivers					2.90	3.45	. 55	19.0
178,800 to 187,000 pounds on	1				0.00	3, 55	e E	22, 4
drivers Class C2, OOoo>	19	10	22	33	2.90	3.00	. 65	22.4
Passenger.	13	12	- 33	99	2, 40	2, 65	. 25	10. 4
Freight:					2.50	2.95	. 45	18.0
Work					2.50		. 10	10.0
Switching.					2.25			
Class C3, QQQoo>:							,	
Oil.	4	4	52	52				
Coal	69	79	58	62				
Passenger—			ĺ					
89,900 pounds on drivers						2.65		
103,400 pounds on drivers					2.55	2.80	. 25	9.8
142,900 pounds on drivers					2.70	2.90	. 20	7.4
159,900 pounds on drivers						3.00		
Freight— 89,900 pounds on drivers			1		2, 40	2, 95	.55	22.9
102 400 pounds on drivers					2. 40	3, 10	.60	24.0
103,400 pounds on drivers 132,000 pounds on drivers					2.70	3. 25	.55	20. 4
140,000 pounds on drivers					2.70	3.25	. 55	20.4
Construction					2.55	2, 85	.30	11.8
Switching—						2.00		
103,400 pounds on drivers					2.55			
132,000 pounds on drivers						2.50		
Work—	1							
103,400 pounds on drivers						2.85		
132,000 pounds on drivers						3.00		
140,000 pounds on drivers					2.70			
Class C4, 0000000>	7	1	80	80	2.90	3, 45	.55	10.0
Freight					2.90		. 55	19.0
Switching. Class E4, 000000>				102	2.20			
Freight.		10		102				
Class F2, oOOoo>	12	12	53	53				
Passenger	12				2.50	2.80	.30	12.0
Class F3, 000000>	4	14	71	71				
Class F3, oŏOOoo> Passenger				l	2.70	3.00	.30	11.1

OREGON SHORT LINE R. R .- Continued.

OREGON S	HORI	LIM	E It	n.—00	mimueu	•					
,	Nun	nber.	weig	rage ht on vers ns).	Rate pe 100 m 10 hours	er day of iles, or s or less.	Incr	eas <b>e</b> .			
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.			
FOUR-CYLINDER COMPOUND LOCOMOTIVES.											
Class B3, OOOo>	8	8	72	72	\$2.70	\$3.00	\$0.30	11.1			
Work	30	28	84	84		3.00					
Freight: 165,300 pounds on drivers					2.90	3.45	.55	19.0			
Class C3, OOOoo>:	1		73								
Passenger— 145,660 pounds on drivers	_				2.60						
110,000 pointe on divers					2.00						
PEORIA & PEKIN UNION RY.											
SINGLE-EXPANSION LOCOMOTIVES.											
Class A3, 000>	21	29	60	67	\$2.25	\$2.50	\$0.25	11.1			
Class B3, 0000>	1	1	61	61	2.25	2.50	. 25	11.1			
Passenger Class C2, OOoo>	3	3	24	24	2. 25	2.50		11.1			
Passenger					2.20	2.50	. 25	11.1			
QUINCY, C	MAH	A & F	CANS	AS CI	ry ry.						
SINGLE-EXPANSION LOCOMOTIVES.											
Class B4, 00000>	7	7	70	70							
FreightSwitching					\$2.58	\$2.88 2.34	\$0.30	11.6			
Class C2, OOoo> Passenger	8	7	27	27	2.25	2.40	.15	6.7			
Class C3, OOOoo>	10	10	51	51	2.58	2.88	.30	11.6			
Rates of pay not governed by class of											
engine: Passenger Through freight			•••••		2.25 2.58	2.40 2.88	.15	6.7 11.6			
Way freight					2. 78 2. 09	3.08	.30	10.8			
Work					2.58	2.34 2.88	.25	12.0 11.6			
Mixed	-,					2.55					
ST. JOSE	PH &	GRA	ND IS	LANI	D RY.						
SINGLE-EXPANSION LOCOMOTIVES.		1									
Class A2, 00>	1	1	33	33							
Switching. Class B3, OOOo>	10	9	56	58	\$2.00	\$2.25	\$0.25	12.5			
Freight	2	2	73	73	2.70	3.20	. 50	18.5			
Freight (lass (2, 0000>	9	7	26	27	2.95	3.25	. 30	10.2			
Passenger	5				2.25	2.40	. 15	6.7			
Class C3, OOOoo>	5	5	48	48	2.25	2.40	. 15	6.7			
Freight					2.65	3.00	. 35	13.2			
ST. JOSEPH TERMINAL R. R.											
SINGLE-EXPANSION LOCOMOTIVES.						1					
Class A3, 000>	4	4	36	36							
Switching.		1	1		\$1.90	\$2.15	\$0.25	13.2			

## ST. LOUIS & SAN FRANCISCO R. R.

		AN F	LIMIT	1500	10, 10.			
*	Nun	aber.	weight driv	rage ht on vers ns).	Rate pe 100 mi 10 hours	les, or	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, OOO>: Oil	115	32 94	51	50 53				
Switching— First-class yards Second-class yards	1				\$2.25 2.15	\$2.50 2.40	\$0. 25 . 25	11. 1 11. 6
Class B3, OOOo>: Oil. Coal		26 30	41	41 24		2. 10		
Freignt—					2.65	2.95	. 30	11.3
Coal Class B4, 0000o>: Oil Coal	170	9		70	2.65	3. 10	. 45	17.0
			77	80	2.90	3. 20	. 30	10.3
20 by 24 inch cylinders 20 by 21 by 28 inch cylinders 22 by 28 inch cylinders 22 by 30 inch cylinders					3. 25 3. 25 3. 50	3.30 3.40	. 05 . 15	1. 5 4. 6
Oil		25	32	42 29			·	
Passenger: Oil— Over 18-inch cylinders Under 18-inch cylinders					2.50	2.65	. 15	6.0
Under 18-inch cylinders Coal— Over 18-inch cylinders Under 18-inch cylinders					2. 25	2.40 2.65	. 15	6.7
Clara C2 OOOoo>:	}			62	2.25	2.40	. 15	6.7
Oil	402	332	58	56	2.50			
Oil burners— 18 and 19 inch cylinders 20-inch and over						2.95 3.05		
Coal burners—  18 and 19 inch cylinders  20-inch cylinders and over			1			3. 10 3. 20		
Class F3, 000000>:     Oil		5 35	61	73 68				
Passenger—					2.50	2.65	. 15	6.0
18-inch cylinders and over 8-wheel all engines Coal burners— 18-inch cylinders and over					2.50 2.50	2.80	. 30	12.0
8-wheel all engines					2.50	2.80	. 30	12.0
LOCOMOTIVES. Class C3, O'O'Ooo>:								-
Coal		20	69	69	3.05	3.35	.30	9.8
Freight— Coal burners Class E8, 00000000000> Freight		. 7		180		4.00		
TWO-CYLINDER COMPOUND OR CROSS- COMPOUND LOCOMOTIVES.								
Class C3, OOOoo> Coal	. 5	5	63	63				
Coal burners		•••••		•••••	2.90	3. 20	.30	10.3

#### ST. LOUIS, BROWNSVILLE & MEXICO RY.

	Number.		Ave weigh driv (to)	ht on		r day of lles, or s or less.	Increase.	
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES, <sup>1</sup> Class A3, OOO>,	3	3	50	50				
Switching. Class C2, OO JO>		14	29	29	\$2. 25	\$2.50	\$0.25	11.1
Passenger Class C3, OOO 30 > .•		12	48	48	2. 28	2.43	. 15	6.1
Passenger Through freight					2. 28 2. 70	2. 43 2. 85	. 15	6. 1 5. 6
Local freight					3.06	3. 21	. 15	4.9

## ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Clara 42 0005	100	100	77	77				
Class A3, 000>	100	100	11	11	89 95	\$2,50	\$0, 25	11.1
Switching Class B3, OOOo>				40	34.40	\$2.00		
Class B3, OOO0>				40		3.10		
Through freight						3. 30		
Local freight	145	169	71	75		3.30		
Through freight—	140	102	11	10				
22 by 30 inch cylinders					3, 25	3, 55	.30	9.2
19½ by 28 inch cylinders						3, 35	.30	9.8
20 by 24 inch cylinders					2.90	3. 20	.30	10.3
Local freight—					2. 50	3. 20	.00	10. 5
22 by 30 inch cylinders					3, 45	3.75	.30	8.7
19½ by 28 inch cylinders					3, 25	3.55	.30	9. 2
20 by 24 inch cylinders					3. 10	3, 40	.30	9.7
Class C2, OOoo>	34	40	23	24	0.10	0. 10	.00	3.1
Passenger—	0.7	10	20	21				
Under 18-inch cylinders					2, 25	2, 40	. 15	6.7
18-inch cylinders and over					2, 50	2. 65	. 15	6.0
Class C3, 00000>	175	179	48	48	2.00	2.00	. 10	0.0
Through freight—	110	1.0	10	10				
19½ by 28 inch cylinders					3.05	3, 35	30	9.8
20 by 24 inch cylinders					2,90	3, 20	30	10.3
19 by 24 inch cylinders					2, 80	3, 10	.30	10.7
Local freight					2.00	0.20	.00	20.1
19½ by 28 inch cylinders					3. 25	3, 55	.30	9.2
20 by 24 inch cylinders					3, 10	3, 40	,30	9.7
19 by 24 inch cylinders					3,00	3, 30	. 30	10.0
Passenger—					0,00	0,00		2010
20 by 24 inch cylinders					2.65	2,80	. 15	` 5.7
19 by 26 inch cylinders					2, 50	2, 65	. 15	6.0
Class C4, 000000>	19	19	86	86				
Through freight					3.30	3, 60	. 30	9.1
Local freight					3, 50	3, 80	.30	8, 6
Class F2, 00000>	30	30	50	50				
Passenger					2.65	2.80	. 15	5.7
Class F3, 000000>	12	12	59	59				
Passenger					2.65	2.80	. 15	5.7

# SAN ANTONIO & ARANSAS PASS RY.

SINGLE-EXPANSION LOCOMOTIVES. <sup>2</sup> Class A3, OOO>	2	3	38	41				
Switching— First-class yards. Second-class yards.					\$2. 25 2. 15	\$2.50 2.40	\$0.25 .25	11. 1 11. 6
Class B3, 000o> Switching— First-class yards			39	41	2. 25	2, 50	. 25	11.1
Second-class yards					2. 15 2. 70	2. 40 2. 85	. 25	11. 6 5. 6
Local freight. Work train.					3. 10 2. 70	3. 25 2. 85	. 15	4.8 5.6

<sup>&</sup>lt;sup>1</sup> All oil-burning locomotives.

<sup>2</sup> All oil-burning locomotives.

Through freight is 100 miles, 8 hours or less; passenger is 100 miles, 5 hours or less.

# SAN ANTONIO & ARANSAS PASS RY .- Continued.

	Nun	nber.	weig dri	rage ht on vers ns).	100 m	er day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.								
Class C2, OO00>	24	20	27	29				
Passenger—		20	21	23				**********
Under 18-inch cylinders 18-inch cylinders and over					\$2. 25 2. 50	\$2.40 2.65	\$0.15	6.7
Class C3, OOOoo>	9	9	49	49			. 15	6.0
Class C3, OOOoo> Through freight Local freight					2. 70 3. 10	2.85 3.25	. 15	5.6
Work train					2.70	2.85	. 15 . 15	4.8 5.6
SAN PEDRO, LO	OS AN	GELI	ES & S	SALT	LAKE	R. R.		
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>:	11	1.1						
OilCoal	11 2	11 2	74 75	74 75		•••••	•••••••	•••••••
Switching—	_							
Oil Coal					\$2, 35 2, 35	\$2, 60 2, 60	\$0. 25 . 25	10.6 10.6
Class B4. 00000>:		0-			-,00	2.00	. 20	10,0
Oil. Coal.	63 21	63 21	92 90	92 90				
Freight, oil burners—	-	-						
West of Otis East of Otis			•••••		3.05 3.05	3. 20 3. 30	. 15 . 25	4, 9 8, 2
Freight coal humans					3. 15	3. 45	.30	9. 5
Class C2, OOoo>: Oil.	4	4	31	31				
Cual	8	8	34	34				
PassengerClass C3, OOOoo>:					2. 50	2, 65	. 15	6.0
UII	8	8	56	56	,			
Coal Passenger	1		45		2, 50	2, 65	. 15	6, 0
Class F2, oOOoo> (oil)	4	4	53	53				
Passenger Class F3, 000000>					2.50	2. 65	.15	6.0
Class F3, 000000>: Oil	20	20	72 72	72 72				
Coal Passenger—	6	6	72	72			• • • • • • • • • • • • • • • • • • • •	
Oil					2.75	2.90	. 15	5. 5
Coal. Class Shay (coal)	3	3	63	63	2. 85	3.00	.15	5. 3
Switching					2. 80	3.05	. 25	8.9
SPOKANE,	DOD!	DT A NT	D & C	E A MM	TE DV			1
SINGLE-EXPANSION LOCOMOTIVES.	ION	L LAN.	1	LATI	LERI			
Class A3, OOO>	5	6	75	69				
Switching					\$2.00	\$2.50	\$0.50	25. 0
Class B3, OOOo> Freight	1	1	42	42	2.00	2.95	. 95	47.5
Class B4, 00000>	13	14	83	82				
Freight Class C2, OOoo>	2	6	28	28	3.00	3. 40	. 40	13.3
Passenger			20		2. 55	2. 55	.00	0.0
Class C3, OOOoo> Passenger		16		56		3. 05		
Class E3, 0000o> Freight	15	15	75	75				
					2. 80	3.40	. 60	21.4
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class C3, OOOoo>		10		78		3.05		• • • • • • • • • • • • • • • • • • • •
Class F2, oOOoo>	10	10	54	54				*******
Passenger	*****				2.75	3.05	.30	10.9

SOUTHERN PACIFIC CO.

	Nun	nber.	weig dri	rage ht on vers ns).	100 m	rday of lles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>: Oil	144	152	60	61				
Coal Switching— First-class yards	11	6	60	62	\$2, 25	\$2.50	\$0, 25	11 1
Second-class yards					2. 15	2.40	. 25	11.1
Oil	110 7	151 8	64 59	70 66			••••••	
Passenger—Oil and coal— Valley, 18-inch cylinders and over. Mountain, 18-inch cylinders and					2. 25	2.65	. 40	17.8
Between Roseville and Truckee					2.98	3. 13 3. 90	.15	5.0
Passenger—Over 140,000 pounds on drivers— Valley					2.50	2.65	. 15	6.0
Mountain					3.12	3. 27	. 15	4.8
Coal Oil	41 267	274	91 91	93 92				
18-inch evlinders and over-					2.25	2.65	. 40	17.8
Valley. Mountain Over 140,000 pounds on drivers— Valley. Mountain					2.98 2.50	3. 13 2. 65	. 15	5.0
Between Roseville and					3. 12	3. 27	. 15	4.8
Truckee Class C2, OOoo>: Coal	4	1	29	16		3.90		
Oil Passenger—	171	165	30	32				
Less than 18-inch cylinders— Valley. Mountain Cylinders 18 inches and over—						2.40 3.00		
Valley					2. 25 2. 98	2.65 3.13	.40	17.8
Mountain. Passenger—Coal and oil— Over 140,000 pounds on drivers—					2.90	5. 15	. 15	5.0
Mountain					2. 50 3. 12			
Class C3, OOOoo>: Coal Oil Passenger—Oil and coal—	16 241	15 255	51 51	53 53				
					2, 25	2.65	.40	17.8
Valley  Mountain  Over 140,000 pounds on drivers— Valley					2.98	3.13	.15	5. 0
Valley.  Mountain.  Between Roseville and					2.50 3.12	2. 65 3. 27	.15	6. 0 4. 8
Mountain. Between Roseville and Truckee. Class C4, OOOOoo> (oil)	22	31	64	63		3.90		
Cylinders 18 inches and over—					2. 25	2.65	. 40	17.8
Mountain Over 140,000 pounds on drivers—					2. 98 2. 50	3. 13 2. 65	. 15	5. 0 6. 0
Valley  Mountain Between Roseville and Truckee Class D2, 000>(0il) Passenger					3.12	3. 27	. 15	4.8
Class D2, oOO>(oil)	2	2	12	12		3.90		
Valley. Class E3, 00000>(oil) Passenger.	7	7	40	40	2.25	2.65	. 40	17.8
Passenger					2.75	2.90	. 15	5.5

## SOUTHERN PACIFIC CO .- Continued.

	1							
	Nun	aber.	weig dri	rage ht on vers ns).	Rate pe 100 mi 10 hours	r day of les, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.								
Class E4, 000000>(coal) Over 140,000 pounds on drivers— Freight—							-	
Valley Mountain, 8 miles per hour Mountain, 10 miles per hour						\$3.12 3.40		
Mountain, 10 miles per hour  Class F2, 000oo>: Coal	7	2		1				
Oil Passenger— Cylinders 18 inches and over—	34	2 45	52 53	50				
Valley Mountain					\$2.25 2.98	2. 65 3. 13		17.8 5.0
Valley					2.50 3.12			
Class F3, 000000>:	16 12	16 22		70 71				
Passenger— Valley Mountain					2.50 3.12	2. 65 3. 27	. 15 . 15	4.8
Between Roseville and Truckee FOUR-CYLINDER COMPOUND LOCOMOTIVES.					3, 90	3. 90	.00	0.0
Class B3, 0000>: Oil	7	10	74	79				
Coal	33	13	74 72	72 72				
Volley						2. 61 2. 97		
Mountain, 8 miles per hour Mountain, 10 miles per bour 110,000 to 140,000 pounds on drivers—						3. 22		
Valley  Mountain, 8 miles per hour  Mountain, 10 miles per hour  Over 140,000 pounds on drivers—					2, 69 2, 96 3, 21	2. 84 3. 11 3. 36	.15 .15 .15	5. 6 5. 1 4. 7
Over 140,000 pounds on drivers— Valley. Mountain, 8 miles per hour Mountain, 10 miles per hour Between Roseville and Truckee— Mallet.					2. 82 3. 10	2. 97 3. 25	.15	4, 8
Mountain, 10 miles per hour  Between Roseville and Truckee— Mallet					3.35	3. 50 4. 00	.15	4.5
Mallet						3.75		
drivers—	1					2, 76 3, 12		
Valley Mountain, 8 miles per hour Mountain, 10 miles per hour 110,000 to 140,000 pounds on drivers—						3, 27		
drivers— Valley. Valley. Mountain, 8 miles per hour Mountain, 10 miles per hour Over 140,000 pounds on drivers— Valley.					2, 69 2, 96 3, 21	2, 99 3, 26 3, 51	.30 .30 .30	10.6 9.7 9.0
Over 140,000 pounds on drivers— Valley . Mountain, 8 miles per hour					2. 82 3. 10	3. 12 3. 40	.30	10.6 9.7
Over 140,000 pounds on drivers— Valley. Mountain, 8 miles per hour. Mountain, 10 miles per hour. Between Roseville and Truckee— Mallet.					3. 35	3. 65	.30	
Mallet					3.75		.00	.0

#### SOUTHERN PACIFIC CO.—Continued. .

	1							
	Nun	nber.	weig	rage ht on vers ns).	100 m	er day of iles, or s or less.	Incr	eas <b>e</b> .
	1909	1911	1909	<del>1</del> 911	1909	1911	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES—continued.								
Class C3, OOOoo>:	4	4	71	71				***********
Coal— Freight—Coal— Less than 75,000 pounds on drivers—						60.01		
Valley						\$2.61 2.97		
75,000 to 110,000 pounds on driv-			}			3. 22		
Valley					\$2.69 2.96	2. 71 2. 97	60.02	0.7
Valley. Mountain, 8 miles per hour Mountain, 10 miles per hour Over 140,000 pounds on drivers—		,				3. 22	. 01	.3
Mountain, 8 miles per hour					2. S2 3. 10			
Over 140,000 pounds on drivers— Valley. Mountain, 8 miles per hour. Mountain, 10 miles per hour. Between Roseville and Truckee.		!		• • • • • •	3. 35			
Class F2, 00000>:		1			3, 13			
CoalOil.	9	22	53 53	53				
Passenger— Cylinders 18 inches and over— Valley					2. 25			
Mountain. Over 140,000 pounds on drivers— Valley					2.98			
Valley					2. 50 3. 12			
Truckee					3.90			
Freight— 75,000 to 110,000 pounds on driv- ers— Valley  Mountain & miles per hour								
Mountain, 8 miles per hour						2.71 2.97		
Mountain, 8 miles per hour  Mountain, 10 miles per hour  Class E8, 00000-00000> (oil)		17	197	197		3. 22		
Passenger-			101	301	2, 82	4,00	1.18	41.8
Valley					3. 35	4.00	. 65	19. 4
Freight— Valley						4.00		
Mountain						4. 00		• • • • • • • • • • • • • • • • • • • •
TWO-CYLINDER COMPOUND OR CROSS- COMPOUND LOCOMOTIVES.								
Class B4,00000>: Oil	20	15	87	87				
Freight—Oil— Over 110,000 to 140,000 pounds on	20	10	01	01				
drivers— Valley					2.69	2.84	. 15	5.6
Mountain, 8 miles per hour Mountain, 10 miles per hour				:	2.96 3.21	3.11 3.36	. 15 . 15	5.1 4.7
Valley					2.82	2.97	. 15	5.3
Mountain, 8 miles per hour Mountain, 10 miles per hour Between Roseville and Truckee—					3. 10 3. 35	3. 25 3. 50	. 15	4.8
Mallet						4.00		
All otherClass C3, OOOoo>:						3. 75		
Less than 75,000 pounds on driv- ers—	1		50					
Vallan						2. 84 3. 11		
Mountain, 8 miles per hour Mountain, 10 miles per hour						3. 36		

# SOUTHERN PACIFIC CO.—Continued.

SOUTHE	RN P	ACIFI	C CO.	.—Con	inued.			
	Nur	nber.	weig dri	erage ht on vers ns).	100 m	or day of iles, or s or less.	Incr	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LOCOMOTIVES—continued.								
Class C4, OOOOoo> (oil) Over 140,000 pounds on drivers—	24	15	67	69				,
Valley.  Mountain, 8 miles per hour.  Mountain, 10 miles per hour.  110,000 to 140,000 pounds on drivers.	,				\$2.82 3.10 3.35	\$2. 97 3. 25 3. 50	\$0. 15 . 15 . 15	5.3 4.8 4.5
Valley Mountain, 8 miles per hour Mountain, 10 miles per hour					2. 69 2. 96 3. 21	2.84 3.11 3.36	. 15 . 15 . 15	5. 6 5. 1 4. 7
TE	XAS	& PA	CIFIC	RY.	I			1
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, OOO>	42	41	38	38				
First-class yards. Second-class yards. Class B2, OOo> (oil).		18		35	\$2. 25 2. 15	\$2.50 2.40	\$0. 25 . 25	11. 1 11. 6
Switching: First-class yards. Second-class yards. Class B3, 0000>						2. 50 2. 40		
Switching: First-class vards			35		2. 25			
Second-class yards.  Class B4, 00000 > (oil)		2		35	2.15	•••••		
First-class yards. Second-class yards. Class C2, OOoo>	84	84	24	24		2. 50 2. 40		
Through freight, 18-inch cylinders or less					2.70 3.00	3.00 3.30	.30	11. 1 10. 0
Passenger: Under 18-inch cylinders 18-inch cylinders or over Class C3, 00000>					2. 25 2. 50	2. 40 2. 65	. 15 . 15	6. 7 6. 0
Class C3, OOOoo> Passenger: Under 18-inch cylinders	242	241	55	55	2. 25	2.40	. 15	6. 7 6. 0
Through freight: 18-inch cylinders or under					2. 50 2. 70 2. 85	2. 65 3. 00 3. 15	. 15	11. 1 10. 5
19-inch cylinders. 20-inch cylinders. Local freight: 18-inch cylinders or under.					3.05	3.35	.30	9.8
19-inch cylinders					3. 15 3. 25	3. 45 3. 55 3. 65	.30	9. 5 9. 2
22-inch cylinders. Class F2, 00 000> Passenger	2	2	55	55	2.50	3.75 2.75	.25	10.0
	NION	PAC	IFIC 1	R. R.				
SINGLE-EXPANSION LOCOMOTIVES.	1101	1 1101						
Class A3, 000>	87	105	57	60				
Switching:  18 by 26 inch cylinders.  19 by 26 inch cylinders.  Class B3, OOO>.	2	2	48	48	\$2. 25 2. 25	\$2, 50 2, 50	\$0.25 .25	11. 1 11. 1
Freight, 18 by 26 inch cylinders		2			2.70	3.00	.30	11.1

#### UNION PACIFIC R. R .- Continued.

Average

Rate per day of

	Num	ber.	weigh driv (tor	rers	100 mi 10 hours	les, or	Incre	ease.
	1909	1911	1909	1911	1909	1911	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—con.								
Class B4, 0000o>	164	212	88	87				
Freight: 21 by 28 inch cylinders 21 by 30 inch cylinders 22 by 30 inch cylinders 20 by 24 inch cylinders Switching, 22 by 24 inch cylinders. Class C2, OOoo> Passenger, 18 by 26 inch cylinders.					53.25	\$3.55	\$0.30	9.2
21 by 30 inch cylinders					3.25	3.55	.30	9.2
22 by 30 inch cylinders					3. 25 3. 00	3. 55 3. 30	.30	9. 2 10. 0
Switching, 22 by 24 inch cylinders					2. 25	2.50	. 25	11.1
Class C2, OOoo>	64	56	32	32	2.50	2.65	.15	6.0
Freight 18 by 26 inch cylinders					2.70	3.00	. 30	11.1
Switching, 18 by 26 inch cylinders Class C3, OOOoo>	118	123	56	56	2. 25	2.50	. 25	11.1
Freight:	1					2 00	1	
18 by 24 inch cylinders					2.70 2.85	3.00 3.15	.30	11. 1 10. 5
20 by 28 inch cylinders					3.00	3.30	. 30	10.0
19 by 24 inch cylinders 20 by 25 inch cylinders 20 by 24 inch cylinders 20 by 28 inch cylinders					2.85 2.95	3. 15	. 30	10.5
Passenger:						0.00	100	
19 by 24 inch cylinders					2.65 2.65	2.80 2.80	.15	5.7 5.7
20 by 28 inch cylinders					2.75	2.90	. 15	5.5
18 by 24 inch cylinders					2. 25	2.65 2.50	. 25	11.1
Passenger:  19 by 24 inch cylinders.  20 by 24 inch cylinders.  20 by 28 inch cylinders.  18 by 24 inch cylinders.  Switching, 18 by 24 inch cylinders.  Class C4, OOUOo>  Freight, 21 by 30 inch cylinders.	. 8	8	83	83				
Freight, 21 by 30 inch cylinders Class E4, 000000>		39		104	3. 25	3.55	. 30	9.2
Freight, 233 by 30 inch cylinders						3.55		
Passenger, 26 by 28 inch cylinders	41	24	54	53		3.75		
Class F2. 00 000> Passenger, 20 by 28 inch cylinders				71	2.75	2.90	. 15	5. 5
Class F3, 000000>		60	71	71	2.85	3.00	.15	5.3
FOUR-CYLINDER COMPOUND LOCOMOTIVES		Ì						
Class B4, 0000o>	108	76	82	82				
Freight:					0.07	0.77	200	0.0
153-26 by 30 inch cylinders 17-28 by 30 inch cylinders					3. 25 3. 25	3, 55 3, 55	.30	9.2
Class C3, 00000>	45	40	70	70				5.5
Class C3, OOOoo> Passenger, 15½-26 by 28 inch cylinders Freight, 15½-26 by 28 inch cylinders.	3				2.75 2.95	2.90 3.25	.15	10.2
Class F2, oOOoo> Passenger, 16-27 by 28 inch cylinders.	. 15	15	55	55	1			5.5
Class E8, 00000-00000>		3		147	2.75	2.90	. 15	5. 5
Freight, 26-40 by 30 inch cylinders						4.00	1	
W	тент	'A VA	LLEY	RY.				
	1			,		1	1	1
SINGLE-EXPANSION LOCOMOTIVES.								
Class B3, 000o>	. 2	8	58	46				
Freight:					\$2,60	\$2,90	\$0.30	11.0
Local					2.80	3. 10	30.30	11.5 10.7
Class B4, 0000o>	. 2	2	45	58				
Through					. 2.80	3.10	.30	10.7
Local . Class C2, O Ooo> Passenger		6	25	25	. 3.00	3.30	. 30	10.0
UMOS 04, 0000 /	. 0	0	40	40	1			6.7
Passenger					. 2. 25	2.40	. 15	0.0
Passenger Freight: Through					2. 25	2.40	. 15	6. 6

COMPARISON OF SCHEDULES IN EFFECT BEFORE AND AFTER THE AWARD OF THE ARBITRATION BOARD.

As further illustrating the effect of the application of the award of the arbitration board, and in order to corroborate the statements based on the classification of engines of the Interstate Commerce Commission, a comparison, so far as it was possible, was made from the printed or typewritten official schedules of rates of pay and working rules in effect on the different railroads prior and subsequent to the award of the arbitration board. The comparison of rates was made on a day, hour, mileage, or trip basis, according to the standard of comparison afforded by the schedules of the individual railroads. In the case of some companies no comparison was possible because of the basis of wage payments as the result of the arbitration proceedings. It will be noted that the increases in rates of pay shown in the following series of tables are practically the same as those first set in the comparison according to the Interstate Commerce Commission's classification of locomotives.

The detailed comparison by railroads, arranged in alphabetical order, is given below. In the case of each railroad a detailed basic comparison is made, followed by derivative tables which show the amount and per cent of increase in rates of pay according to principal

branches of service.

## ATCHISON, TOPEKA & SANTA FE RAILWAY CO.

On the Atchison, Topeka & Santa Fe Railway the rates of pay to passenger train firemen, as the result of the arbitration board award, were advanced 15 cents a day, which was equivalent to increases over preexisting rates of from 5.4 to 6.7 per cent. On coal-burning locomotives in mountain and helper service, rates of pay were advanced 9.7 to 14 per cent; and on oil-burning engines 4.8 to 7 per cent, accord-

ing to classes of engine and operating districts.

In through freight service, firemen in all districts and on all types of engines, except Mikado, Decapod, and Santa Fe types, had their rates increased 30 cents a day on coal-burning and 15 cents a day on oil-burning locomotives. On Mikado, Decapod, and Santa Fe types of locomotives the advances secured as the result of the arbitration ranged, according to operating districts, from 30 to 92 cents a day over preexisting rates, being equivalent in terms of percentages to increases in rates of pay from 8.7 to 32.5 per cent. same advances in rates were allowed in work train as in through freight service. In switching service an increase was granted of 25 cents a day, which was equivalent to increases over rates which had been paid before the arbitration in various yards ranging from 10.9 to 11.6 per cent. In local or way freight service, firemen on all engines except the Mikado type were paid 15 cents more a day than they would have received for the same class of engine in through freight service.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective Man In. 1910.

		Dist	District 1.1			Dist	District 2.2			Distr	District 3.3			Dis	District 4.4	
Class of engine.	Rate per day.	or day.	Increase.	ase.	Rate per day.	er day.	Increase.	ase.	Rate per day.	r day.	Increase	ase.	Rate 4	Rate per day.	Increase.	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	1161	Amount.	Per cent.	1907	1161	Amounit.	Per cent.
PASSENGER SERVICE. Engines under 18-inch cylinders	\$2.25	82 40	51 08	6.7	89 35		0% 70		e9 25	02	00		69			
Engines 18-inch cylinders and over Atlantic Mogul, Prairie, Pacific	2888	2.65	. 15	000	2,2,2,3	2.2.2.2.2.85	15	0.0.0 0.0.0 0.0.0	22.50	2.2.2.2. 8.655 8.655	15	6.0 6.0 6.0 6.0	2,2,2,2,2,2,2,5,5,0,5,0,5,0,5,0,5,0,5,0,	2,2,2,2,5 8,65,63	. 15 . 15 . 15 . 15	6.00 6.00 5.00 5.00
Prairie, Mikado, Decapod, and Santa Fe types.	2.50	2.65	. 15	6.0	2.79	2.94	.15	5.4	2.70	2.85	.15	5.6	2.65	2.80	. 15	, r.c.
									Distri	District 1.5				District 2.6	t 2.6	
	Class	Class of engine.	18.					Rate per day.	day.	Inc	Increase.	R	Rate per day.	day.	Increase	ase.
								1907	1911	Amount.	. Per cent.	tt. 1907	07	1161	Amount.   Per cent.	Per cent.
MOUN **MOUN	YTAIN AN	TO HELPE	MOUNTAIN AND HELPER SERVICE	(4)												
Coal.							<u></u>	\$2.53	68.53	\$0.30	11.9		\$2.15	\$2.45	\$0.30	14.0
10-wheel engines weighing less than 100,000 pounds on drivers.	100,000 p	onnds or	drivers:	0					3 6	06			_ ,	06.30	CT .	0.7
Oil  10-wheel engines weighing 100 000 nounds or over on drivers: 7	unde or	over on o	rivoro.7				<u> </u>	2.64	2.79	. 15	5.7	<u></u>	2.45	2.60	55.	6.1
Coal		10.10					<u>~</u>	2.70	3.00	.30	11.1		2.45	2.75	.30	12.2
On Prairie types with less than 24-inch cylinder, Mogul consolidation weighing 135,000 pounds or over on drivers and balanced compound Prairie:	nch cylin	der, Mog Prairie:	ul consolie	dation w	eighing	135,000 pc	spunc					-		3		5
Coal.								3. 10	25.40	.30	0.4		2.45	2.75	.30	12.2
								_					-	;		4

Chicago and Canon City, Wellington and Pecos, including branches.

Pueblo and Denver.
La Juinta and Raton, Las Vegas and Albuquerque, Rio Grande division and Clovis and Belen.
Raton and Las Vegas.

Colorado Sprines and Palmer Lake, Trinded and Pater. Lamy and Glorieta, Grama and Nutt, and Rincon and Dona Ana, and in 1911 Belen and Mountainair. East of La Junta, and in 1911 between Wellington and Pecos.

Rates given for 1911 also apply to consolidation engines weighing less than 135,000 pounds on drivers.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the ward of the board of arbitration, effective May 16, 1910—Contd.

					District 1.1	ct 1.1			D	District 2.2				Distr	District 3.3	
(Yass of engine.	ngine.			Rate per day.	day.	Inc	Increase.	Rate	Rate per day.		Increase.	6	Rate per day.	er day.	Increase	ase.
				1907	1161	Amount.	Per cent.	. 1907.	1911		Amount. Pe	Per cent.	1907	1911	Amount.	Per cent.
FREIGHT SERVICE.4	ERVICE.4							-								
Coal				\$2.65	\$2.95 2.80	\$0.30 .15	11.3	3 } 42.65	22.	80	80.30 .15	5.7	\$2.85	\$3.15 3.00	\$0.30	10.5 5.3
10-wheel Atlantic: Coal Oil				2.75	3.05	.30	10.	9 5		3.05	.30	10.9	2.95	$\left\{\begin{array}{cc} 3.25 \\ 3.10 \end{array}\right.$	.30	10.2
Mogul and Pacific, also Frairie ty Coal Oil	e types r	ypes burning coal:15	oal:to	2.95	3.25	.30	10.2	3.35		50	.15	9.0	3.35	3.65	.30	9.0
Consideration less than 135,000 pounds on drivers:  Coal  Oil	on pounc	Is on dri	vers:	2.85	3.15	.30	10.	3 3 2.85	ന് ന് 	15	.30	10.5	3.00	3.30	.30	10.0
Balanced compound Prairie 135,000 pounds and over on dri Coal	ie and drivers:	consolidation,	dation, dation,	3.00 {	3.30	.30	10.0	3.35		50	.30	9.0	3.35	3.65	.30	, 9,0 4,5
Oil	re types			3.00	3.75	.75	25.0	3.35	eri	75	.40	11.9	3,45	3.75	.30	%
		Dist	District 4.5			Distr	District 5.6			Dist	District 6.7			Dik	District 7.8	
Class of engine.	Rate pe	ate per day.	Incr	Increase.	Rate per day	r day.	Increase.	ase.	Rate per day.	r day.	Inc	Increase.	Rate	Rate per day.	Increase.	ase.
	1907	1161	Amount.	Per cent.	1907	1161	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
FREIGHT SERVICE.9 8-wheel: Coal Oil	\$2.75	\$3.05 2.90	\$0.30 .15	10.9	\$2.75	( \$3.05 2.90	\$0.30 .15	10.9	\$2.85	\$3.15 3.00	\$0.30 .15	10.	3 } \$2.65	\$2.95	\$0.30	11.3
Old Ariantic:  Coal.  Oil About and Pacific, also Prairie types burning	2.85	3.15	.30	10.5	2.95	3.10	.30	$\frac{10.2}{5.1}$	2.85	3.00	.30	10.5	2.65	2.95	.30	5.7
coal:¹¹6 Coal Oil	3.25	3.55	.30	9.2	3.25	3.55	.30	9.2	2.85	3.15	.30	10.5	2.65	2.95	.30	11.8

5.5	5.3	32.5	Se.	Per cent.	10.9	19.3	6.1	5.7	11.8
			Increase.		1				
.30	.30	. 92	Inc	Amount.	\$0.25 .25	. 8	.15	.15	.30
89	3.13	3,75			550			45°	85
553	60 Ci	က်	Rate per day.	1911	8,000	i c	ici	ાં લં	લંલં
2.74	2.83	83	per		0,0,0		<del>~</del> '		<u>~</u>
~ ~	~	63	Rate	1907	\$2.30 2.25	i	2.44	2.64	2,55
5.3	5.3	31.6			::	: -	<u> </u>	<u></u>	<u> </u>
	•								
.30	.30	06.				0 0 0 0 0	a a a a a a a a a a a a a a a a a a a		
3.15	3.15	3.75				•			
2.85	2.85	2.85							
3.5	62	4				•			
10.5	0.4	15.					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
.30	.30	.50		1					
. 15	. 55	. 75							
	60.00	က်		9		_			
2.85	3, 25	3.25		Class of service.	ING.	WORK TRAIN			
_~	33	en	40	01 0	SWITCHING	H.			
5.3	9.2	11.9	1000	Jass	SW	WOR			
-		-							
.15	.30	40							
	65.4	4.							
3.15	3.55	3.75							
				-					
2.85	3.25	3.35							
					teh.	er:			
Consolidation less than 155,000 pounds on drivers (on 10) line of the consolidation, 155,000 and consolidation, 155,000 pounds and over on pounds and over on the consolidation, 155,000 pounds and over on 155,000 pounds and 155,000 pounds a	pue				Strong City and Bazar Switch First-class yards.	Between Chicago and Denver Coal			
n dr n dr nd Pr nn,13	d,				azar	put	on:		
les ords o	odes.				nd B	3 0 gt	ivis	vici	
nsolidation less than 135,000 pounds on drivers (onl. onl. on the compound Prairie and consolidation, 135,000 pounds and over on pounds and over on pounds.	De				y ar	hic	p 00		
solidation oal Oil need con d consoli	drivers: Coal Oil Ikado, De	Coal			g Cit class var	sen (	il Mexi	Oil	Coal
Consolidation less than 135,000 pounds on drivers (°01). Balanced compound Prairie and consolidation, 135,000 and consolidation, 135,000 and over on pounds and over on	drivers: Coal Oil Mikado, Decapod, Santa Pe types:	<u>ರ</u> ರ			Strong City First-class y Other vards.	etwe	New Mexico division	Oil Bio Grande division:	255
5139			193,	64	五年の 1——7	B	Z	ρ:	i
0100	-0, 1	20C. 5	100,	01	1 6				

<sup>1</sup> Chicago and Canon City and branches, including Wellington and Pecos in 1911. <sup>2</sup> Pueblo and Denver.

<sup>3</sup> La Junta and Raton, Las Vegas and Albuquerque.

4 Not including in 1911 simple engines 24-inch cylinder and over, and compound engines weighing 215,000 pounds or more on drivers, on which the rate in 1911 in all districts was \$3.75 per day.

Raton and Las Vegas.

6 South of Albuquerque, including Clovis and Belen in 1911. Starkville and Hebron, Blossburg and Waldo districts.

8 Santa Fe, and in 1907 Hot Springs.

Firemen on local or way-field frains in 1907 paid 15 cents per 100 miles in addition to rate applying to same classof engine on through runs in the following districts: Main Fine of the first districts, also Chantue and Fulsa runs, line, Chantue and Fulsa runs, line, Souther and district. In 1911, Firemen and Pulsa runs, main line. Fowhere, including Shawnee district, Florence to Winfield, via Seldorado district. In 1911, Firemen on local or way-freight trains, except when Mallet engines were used, paid 15 cents for 100 miles in addition to rate applying to same class of engine on through runs. Firemen in snow-plow service paid same rate as in through freight service as per class of engine used.

Rates of pay per day of locomotive fremen.

Basis of a	day's work.	100 miles or less.	Do.	} Do.	Do.	Do.
District 7.	1911	\$2.95 2.80	2.95	2.95	3.04	82.23 4.93.75 9.00
Distr	1907	\$2.65	3 2.65	3 2.65	3 2.74	2.83
District 6.	1911	\$3.15 3.00	3.15	3.15	$\begin{cases} 3.15 \\ 3.00 \end{cases}$	8.15 3.00 4.00
Distr	1907	\$2.85	2.85	3.85	2.85	2.85
District 5.	1911	\$3.05 2.90	$\left\{\begin{array}{c} 3.25 \\ 3.10 \end{array}\right.$	3.55	$\begin{cases} 3.15 \\ 3.00 \end{cases}$	3.55 3.40 3.75 4.00
Distr	1907	\$2.75	} 2.95	3.25	3 2.85	3.25
District 4.	1911	\$3.05 2.90	3.15	3.55	3.15	3.55 3.40 4.00
Distr	1907	\$2.75	3.85	3.25	3.85	3.25
iet 3.	1911	\$3.15 3.00	3.25	3.65	3.30	3.65 3.75 4.00
District 3.	1907	\$2.85	3.95	3.35	3.00	3.45
ict 2.	1911	\$2.95 2.80	3.05	3.65	$\begin{cases} 3.15 \\ 3.00 \end{cases}$	\$ 3.65 3.75 4.00
District 2.	1907	\$2.65	} 2.75	3.35	3.85	3.35
ict 1.	1911	\$2.95 2.80	3.05	3.25	3.15	8.30 3.15 4.00
District 1.	1907	} \$2. 65	3 2.75	3 2.95	3.85	3.00
	Class of engine.	8-wheel: Coal Oli Oli One	Mogul and Pacific, also Prairie types burning	Consolidation, less than 135,000 pounds on	drivers: Coal. Oil. Balanced, compound, Prairie, and consolida-	tion, 135,000 pounds and over on drivers: Coal Oil Mikado, Decapod, and Santa Fe types.

1907   \$2.44 {   2.64 {   2.55 {		Rate per day.	r day.	
WORK TRAIN SERVICE.  \$2.44 {	Class of engine.	1907	1911	Basis of a day's work.
\$2.44 {				
2.64 { 2.94 }	Coal.  To Moving Attriction.	\$2.44	\$2. 74 2. 59	\$2.74 $2.59$ 10 hours or less, 100 miles or less.4
$\left. \right\} 2.55 \left\{ 2.85 \atop 2.70 \right\}$	What was the state of the state	2.64	2.94	Do.
	(0.41.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.11.00 (0.	2.55	2.85	Do.
and drivers.  Mallet types.	on drivers.  Mailet types.		3.75	Do. Do.

District 1: Chicago and Canon City and branches, including Wellington and Pecos in 1911. District 2: Pueblo and Denver.

District 3: La Junta and Raton, Las Vegas and Albuquerque

District 4: Raton and Las Vogas.

District 5: South of Albuquerque, including Clovis and Belen in 1911.

District 5: Starkville and Hebron, Blossburg and Wado districts.

District 7: Santa Fe and in 1907 Hot Springs

Over 100 miles paid for pro rata

2 Firemen on local or way reight trains in 1907 paid 15 cents per 100 miles in addition to rate applying to same class of engine on through run, in the following districts: Main line, Chicago to Denver, including Emporia and Hutchinson cut-offs, main line, Southern Kansas division, including Third and Girard districts, also Chanute-Tulsa runs; main line, Panfandle division, main line, Newton to Purcell, including Shawnee district. Florence to Winfield, via Eldorado district. In 1911 firemen on local or way freight trains, except when Mallet engines used, paid 15 cents per 100 miles in addition to rate applying to same class of engine on through run. Firemen in snowplow service paid same rate as in through freight service as per class of engine used, 10 hours or less to constitute a day, overtime pro rata. This applying only to firemen on locomotives regularly equipped with wedge plows, or pushing, wedge, rotary, or pull plows while assigned to snowplow service.

Not including in 1911 simple engines with cylinders 24 inches and over in diameter, and compound engines weighing 215,000 pounds or more on drivers, on which the rate in

1911 in all districts was \$3.75 per day.

4 Overtime pro rata.

Rates of pay of locomotive firemen.

	Rate	Rate per—	District 1.1	ct 1.1	Distr	District 2.2	Distr	District 3.3	Distr	District 4.4
Class of engine.	1907	1911	1907 \$	19116	1907 5	19116	1907 6	1911 6	19076	19116
PASSENGER SERVICE.										
Engines with cylinders under 18 inches in diameter	100 miles or less per day.	100 miles or less, 8	\$2.25	\$2.40	\$2.35	\$2,50	\$2.35	\$2.50	\$2.30	\$2.45
cylinders 18 inches and over in diameter	do	less.	25.50	2.65	2.50	2.65	2.50	2.65	2.50	2.65
Audutoc Mogul, Prairie, Pacific Consolidation, balanced compound Prairie, Mikado, Decapod, and		dodo	323 323 323	12.12.1 16.63	19.99 19.09 19.09	2.2.2. 28.83	322	19191 888	12.21 65.53	888 888
Santa Fe types. Mallet	do	do		4.00		4.00		4.00		4.00

Chicago and Canon City, Wellington and Pecos, including branches.

2 Prebio and Denver. La Junta and Katon, Las Vegas and Albuquerque, Rio Grande division, and Clovis and Belen. \*Ration and Las Vegas.

6 Over 100 miles programs, 8 hours constitute a day. When the schedule for any train exceeds 8 hours, all delays, if more than 59 minutes beyond the schedule time, paid for

6 Over 100 miles pro rata. When simple engines having cylinders 24 inches or over in diameter or compound engines weighing 215,000 pounds or over on drivers, whether coal or oil, are used in passenger service, the rate is fixed at \$5.75 per 100 miles or less per day on all districts; 100 miles or less, 8 hours or less, constitute a day. All delays over 8 hours of more than 59 minutes paid for pro rata; 124 miles an hour considered running time. pro rata; 20 miles an hour considered running time.

Clace of entering	District 1.1	t 1.1	District 2.2	ot 2.2	District 3.8	ct 3.8
Citass of engane.	1907	11611	1907	1911	1907	1911
MOUNTAIN AND HELPE	69	8	S	69		
Oil. 10-whole engines weighing less than 100,000 pounds on drivers:	2.53	2.68	2.15	2.30		
Oil.  16-wheel eacines weighing 100,000 pounds or over on drivers: 6	20.03	2.79	2.45	2.60		
Coal Oil On Prairie types with cylinders less than 21 inches in diameter; Mogul consolidations weighing 135,000 pounds or	2.2.70	3.00	2.45	2.75	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
over on drivers, and balanced compound Prairie.  Coal.  Oil.  Mikado Domenod and Santa Ra	3.10	3.40	2.45	2,75	00 69	
Simple engines with cylinders 24 inches or over: Coal Oil		3.75		3.75	07.09	
Compound engines weighing 215,000 pounds or more on drivers:  Coal  Coal  Coal  Oil		3.75		3.75		
Mallet types.		4.00		4.00		
	,				1907	1911
Strong City and Bazar switch.  First-class yards. Other yards.  Deadheading (per mile)		, , , , , , , , , , , , , , , , , , ,			\$2.30 2.25 2.15 .0115	\$2.55 2.50 2.40 . 014
1 Colorado Sprines and Palmer Lake Trinidad and Raton Lame and Glorieta Grama and Nutt. and Rinom and Dona Amar and in 1911 Relen and Mountainair	and Done	Ang. one	in 1011 Re	Jan and W	Countainai	,

1 Colorade Springs and Palmer Lake, Trinidad and Raton, Lamy and Glorieta, Grama and Nutt, and Rincon and Dona Ana; and in 1911 Belen and Mountainair.

2 East of La Junta and in 1911 between Wellington and Pecos.

2 Trinidad and Raton and Lamy and Glorieta.

4 10 hours or less, 100 miles or less, to constitute a day's work; overtime pro rata.

8 Rate given for 1911 also applies to consolidation engines weighing less than 135,000 pounds on drivers.

9 Il hours or less a day; overtime pro rata after 10 hours to be computed in periods of 15 minutes.

## ATCHISON, TOPEKA & SANTA FE RAILWAY-COAST LINES.

On the coast lines of the Atchison, Topeka & Santa Fe Railway increases in rates of pay to passenger train firemen granted by the arbitration board ranged from 5.7 to 6.7 per cent, according to the size of the cylinder of the engine used. In through freight service firemen on coal-burning engines received an advance in pay of approximately 10 per cent, or 30 cents a day; on oil-burning engines the increases granted were about one-half of those granted on engines using coal as fuel. Firemen engaged in switching service had their rates of pay increased slightly more than 11 per cent. On simple engines weighing less than 215,000 pounds on drivers used as helpers, increases of 15 cents (oil) and 30 cents (coal) were granted by the arbitration board; on simple engines weighing more than 215,000 pounds on drivers the advances in rates of pay allowed were considerably larger on coal-burning locomotives, or 96 cents a day, or 34.4 per cent. These large engines also when on work and wreck train service were awarded an increase of \$1.10, or 41.5 per cent per day. Hostlers secured an increase of 25 cents a day, or 8.3 per cent, while those employed on a monthly basis had their rates of pay increased 5 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

		Pas	ssenger.		Freight		ge rate pe trip.1	r specified
Class of engine.	Rate p	er day.	Incr	ease.	Rate p	er day.	Incr	ease.
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Engines under 18-inch cylinders	\$2, 25	\$2, 40	\$0, 15	6, 7				
Engines 18-inch cylinders and		7,						
Over Engines 135,000 pounds or more on drivers, and At-	2. 50	2. 65	. 15	6.0		• • • • • • •		
lantic type balance com- pound, between Albuquer- que and Bakersfield, only 8-wheel: 2	2.65	2. 80	. 15					
Coal	• • • • • • •			••••••	\$2.80	\$3.10 2.95	\$0.30 .15	10. 7 5. 4
nounds on drivers: 2						2.00	.10	0. 1
CoalOil					2.89	{ 3. 19 3. 04	.30	. 10.4
10-wheel, 100,000 pounds or						0.01	.,10	0, 2
more on drivers: 3 Coal Oil	• • • • • • • • • • • • • • • • • • • •				2.92	{ 3. 22 3. 07	.30	10. 3 5. 1
Prairie: 4								
Coal Oil					3. 22	$ \left\{ \begin{array}{c} 3.52 \\ 3.37 \end{array} \right. $	. 30	9. 3 4. 7
000 pounds on drivers: 2 Coal					} 2,97	3.27	.30	10, 1
Oil Simple consolidation 135,000	••••••			,	} 2.91	3.12	. 15	5, 1
pounds or more, and less than 215,000 pounds on driv- ers, and less than 24-inch cylinders, and compound consolidation less than 215,-								
000 pounds on drivers: 5 Coal					3.12	{ 3, 42 3, 27	.30	9. 6 4. 8

<sup>An additional allowance of 15 cents per 100 miles on certain regularly assigned local freight runs allowed 1907 and 1910 and on all other regularly assigned local freight runs an additional allowance of 25 miles per 100 miles paid in 1910.

Rates for 1910 do not apply to engines with 24-inch cylinder or over.

Rates for 1910 do not apply to coal burners with 24-inch cylinder or over.

Rates for 1910 do not apply to simple coal burners 24-inch cylinder or over.

Rates for 1910 do not apply to simple coal burners 24-inch cylinder or over.</sup> 

<sup>5</sup> Includes in 1907 all classes of engines not previously enumerated.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

		Sw	itching.			Gallu	p coal run.	
Class of engine.	Rate p	er day.	Incr	ease.	Rate p	er day.	Iner	ease.
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
All engines: First-class yards Second-class yards All engines	\$2. 15 2. 25	\$2. 40 2. 50	\$0. 25 . 25	11.6	\$2.50	\$2.75	\$0. 25	10.0
		В	elper.		V	Vork and	l construct	ion.
Class of engine.	Rate p	er day.	Incr	ease.	Rate p	er day.	Iner	ease.
	1907	1910	Amount.	Per cent.	1907 1910		Amount.	Per cent.
Simple engines less than 24- inch cylinders; and com- pound engines less than 215,000 pounds on drivers: Coal.  Simple engines 24-inch cylin- ders and over; and com- pound engines 215,000 pounds or more on drivers:	} \$2. 79	\$3.09 2.94	\$0.30 .15	10. 8 5. 4	} \$2.65	\$2.95	\$0.30	11.3
CoalOil.	2.79	3.75 2.94	.96	34. 4 5. 4	2.65	3.75	1.10	- 41.5
		н	ostlers.		Mixed	runs—Ro	ound trip E lbrook.	Scandido-
Class of engine.	Rate p	er day.	Incr	ease.	Rate pe	r month.	Incr	ease.
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
All engines	\$3.00	\$3, 25	\$0. 25	8.3	\$78.52	\$82. 43	\$3.91	5, 0

# Rates of pay per day of locomotive firemen.

Class of engine.	and E	uerque Bakers- ld. <sup>1</sup>		ngeles sion, tain. <sup>1</sup>	Valley Valley sio	divi-
	1907	1910	1907	1910	1907	1910
FREIGHT SERVICE. <sup>2</sup> 8-wheel: <sup>3</sup>						
Oil	\$2.74 2.74	\$2.89 3.04	\$2.95 2.95	\$3.10 3.25	\$2.70 2.70	\$2.85 3.00
Oil	2.90 2.90	3. 05 3. 20	2. 95 2. 95	3.10 3.25	2. 83 2. 83	2. 98 3. 13
Oil Coal Prairie:	2.95 2.95	3. 10 3. 25	2.95 2.95	$\frac{3.10}{3.25}$	2. 85 2. 85	3.00 3.15
Oil	3.35 3.35	3.50 3.65	3.35 3.35	3. 50 3. 65	2. 95 2. 95	3. 10 3. 25
Oil. Coal.  Simple consolidation 135,000 pounds or more, and less than 245,000 pounds on drivers, and cylinders less than 24 inches in diameter, and compound consolidations less than 215,000 pounds on drivers: <sup>6</sup>	3.10 3.10	3. 25 3. 40	2. 95 2. 95	3. 10 3. 25	2.85 2.85	3.00 3.15
Oil	3.35 3.35	3.50 3.65	3. 05 3. 05	3. 20 3. 35	2. 95 2. 95	3. 10 3. 25
All engines not otherwise provided for, 215,000 pounds or more on drivers, and all simple engines with cylinders 24 inches or more in diameter: Oil Coal. Mallet type.		3.75		3.75		3. 10 3. 75 4. 00

<sup>Basis of day's work, 10 hours, 100 miles or less; on schedules of more than 10 hours, delays of more than 1 hour beyond the schedule paid for pro rata.
An additional allowance of 15 cents per 100 miles on certain local regularly assigned local freight trains allowed 1907 and 1910, and on all other regularly assigned local freight runs an additional allowance of 25 miles per 100 miles paid in 1910.

Rates for 1910 do not apply to engines with cylinders 24 inches or more in diameter.

Rates for 1910 do not apply to coal burners with cylinders 24 inches or more in diameter.

Rates for 1910 do not apply to simple coal burners with cylinders 24 inches or more in diameter.
Includes in 1907 all classes of engines not previously enumerated.</sup> 

## Rates of pay per day of locomotive firemen—Continued.

Class of engine.		p coal in.	Hel		Work const	true-	Passe	nger.1	Swite	hing.
	1907 2	1910	1907 <sup>3</sup>	1910	19073	1910	1907	1910	1907	1910
All engines. Simple engines with cylinders less than 24 inches in diameter and compound engines less than 215,000 pounds on drivers: Coal. Oil. Simple engines with cylinders 24 inches or over in diameter and compound engines 215,000 pounds or more on drivers: Coal. Oil. Mallet type: Coal. Oil.			2.79 2.79 2.79	3.75 5 2.94 4.00	2. 65 2. 65 2. 65	3.75				
Oilburners Engines having cylinders under 18 inches in diameter		• • • • • •			2.65	2.80				
Engines having cylinders 18 inches and over in diameter Engines 135,000 pounds or more on drivers and Atlantic type balance compound, between Albuquerque and Bakersfield only .							2.50	2. 65		
Switching: 6 First-class yards. Second-class yards.									\$2. 15 2. 25	\$2.40 2.50

Constantin	Ra	ite.
Class of service.	1907	1910
Hostlers, per day of 12 hours	\$3.00 2.40	\$3. 25 2. 40
Escandido-Folbrook: Mixed runs, round trip per month. Deadheading, per mile.	78.52 .021	82. 43 . 021

6 10 hours or less, one day; overtime, pro rata.

Note.—Overtime, pro rata; no overtime for delays of 59 minutes or less, passenger service.

#### CANADIAN NORTHERN RAILWAY CO.

Passenger train firemen employed by the Canadian Northern Railway had their rates of pay advanced by the arbitration award from 5 to 6.4 per cent, and in freight, work train, and switching service, from 9.2 to 12.8 per cent. Hostlers' daily rates of pay were increased from \$2.90 to \$3.15 a day, or 8.6 per cent.

<sup>&</sup>lt;sup>1</sup> Hates given are for 100 miles or less, 8 hours a day's work.
<sup>2</sup> 10 hours constitute a day's work.
<sup>3</sup> 10 hours or less constitute a day's work.
<sup>4</sup> Except between Pictonville and San Bernardino, where rate is \$2.76 per day, 1907; coal, \$3.06 per day, 1910; oil, \$2.91 per day, 1910.

<sup>6</sup> Except between Pictonville and San Bernardino, where rate is: Oil, \$2.91 per day, 1910; coal, \$2.94 per day, 1910.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

					-				
		I	assenger.		Frei	ght, m	ixed, or si train.1	nowplow	
Class of engine.		e per	Incr	ease:		e per	Incr	ease.	
	1908	1910	Amount.	Per cent.	1908	1910	Amount.	Per cent.	
Consolidation	\$3.00	\$3.15	\$0.15	5.0	\$3.25	\$3.55	\$0.30	9.2	
dation	2.70   2.85   .15   5.6				3.00 2.80	3.30 3.10	.30	10.0 10.7	
Standard engine, 17 by 24	2.35	2.50	.15	6.4	2.60	2.90	. 30	11.5	
		W	ork trains			S	witching.		
Class of engine,		e per	Incr	ease.		e per	Increase.		
-	1908	1910	Amount.	Per cent.	1908	1910	Amount.	Per cent.	
Consolidation	\$3.00	\$3.30	\$0.30	10.0					
dation 75 to 100 per cent All other engines All engines	2.75 2.55 2.35	3.05 2.85 2.65	.30 .30 .30	10.9 11.8 12.8			\$0.25		
Att engines.					. 20		Hostlers.	11.1	
· Class of e	ngi <b>ne.</b>					e per	Incr	ease.	
					1908	1910	Amount.	Per cent.	
All engines					\$2.90 \$3.15 \$0.25 8				

<sup>&</sup>lt;sup>1</sup> In 1908, 15 cents, and in 1910, 25 cents, added to through freight rates for way freight.

# Rates of pay per day of locomotive firemen.

Class of engine.	Passe	enger.1		, mixed, wplow ns.1	Work	trains.1	Swite	ehing.
	1908	1910	1908 2	1910 ²	1908	1910	1908	1910
Switching, all yards, present estab-	\$3.00 2.90 2.70 2.65 2.35	\$3. 15 3. 05 2. 85 2. 80 2. 50	\$3. 25 3. 00 2. 80 2. 60	\$3.55 3.30 3.10 2.90	\$3.00 2.75 2.55 	\$3. 30 3. 05 2. 85 		
lished (all engines) 3.  Hostlers, per day of 12 hours or less	2.90	3. 15					\$2.25	4 \$2.50

<sup>&</sup>lt;sup>1</sup>Basis of day's work, 100 miles or less, 10 hours or less; overtime pro rata. <sup>2</sup>In 1908, 15 cents; and in 1910, 25 cents added to through freight rates for way freight. <sup>3</sup>Basis of a day's work, 10 hours or less. <sup>4</sup> Overtime pro rata 10 hours per day.

Deadheading, 200 miles or less, minimum passenger rates, actual mileage; distance in excess of 200 miles half minimum passenger rates.

#### CHICAGO & ALTON RAILROAD CO.

As the result of the application of the award of the arbitration board upon the Chicago & Alton Railroad passenger train firemen had their rates of pay advanced, according to class of engine used, from 6 to 6.7 per cent; through freight train firemen, from 10.2 to 11.7 per cent; local freight train firemen, from 8.7 to 22 per cent; work train firemen from 9.3 to 12.9 per cent. Firemen employed in pusher or helper service had their monthly rates of pay increased from \$75 to \$84, or 12 per cent, while those in yard service received an advance of 25 cents a day, or 11.4 per cent. Hostlers were granted an increase in rates of pay of 5 cents an hour, which was equivalent to an advance over former rates of 22.7 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

		I	assenger.			Thr	ough freigh	ıt.	
Class of engine.1		e per	Incr	ease.		e per	Incr	ease.	
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.	
D1, D2, D3, D4, D5, D6, D odd			\$0.15	6.7					
F odd, D7 H1, H2 F3, F4, G3, I1, I2, I3, D7	2.50	2.65	.15	6.0	\$2.95 2.90	\$3, 25	\$0.30 .30	10. 2 10. 3	
Di to D6, inclusive, F1, G1, G2, and all other classes of small engines				·	2.57	2.87	.30	11.7	
		Lo	cal freight.			77	ork train.		
Class of engine.1		e per	Incre	ease.		e per	Increase.		
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.	
H1, H2 F3, F4, G3, I1, I2, I3, D7	\$2.87 2.87	\$3.50 3.45	\$0.63 .58	22. 0 20. 2					
D1 to D6, inclusive, F1, G1, G2, and all other classes of small engines H1, H2, I1, I2, and I3	2.87	3.12	. 25	8.7	\$2.32 2.70{	33.00	\$0.30 .30	12. 9 11. 1	
F3, F4, G3, E, and D7					2. 65	4 2. 95 2. 95	. 25	9.3	
			Pusher.				Yard.2		
Class of engine.1		e per	Incre	ease.		e per	Increase.		
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.	
All engines.	\$75.00	\$84.00	\$9.00	12. 0	\$2. 20	\$2.45	\$0, 25	11.4	

<sup>1</sup> Includes all engines for which comparable data are available.

<sup>2</sup> Average for all yards.

<sup>3</sup> H1 and H2 engines. 4 I1, I2, and I3 engines.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration effective May 16, 1910—Continued.

		Carro	lton Bran	ch.			Hostlers.	
Class of engine.1	Rate	e per	Incr	ease.		e per ur.	Incr	ease.
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.
All engines.	\$2.40	\$2.70	\$0.30	12.5	\$0. 22	\$0. 27	\$0.05	22.7

<sup>1</sup> Includes all engines for which comparable data are available.

## Rates of pay per day of locomotive firemen.

Class of engine.1	Passe	nger.2		ough ght.3	Wor	k train.		cal ght.3	Host	lers.
	1907	1912	1907	1912	1907	1912	1907	1912	1907	1912
D1, D2, D3, D4, D5, D6, D odd I1, 12, I3, E, G1, G2, G3, F1, F3, F4, F odd, D7. H1 and H2. F3, F4, G3, I1, I2, I3, D7. D1 to D6, inclusive, F1, G1, G2, and all other classes of small engines H1, H2, I1, I2, and I3. F3, F4, G3, E, and D7. D1 to D6, inclusive, F1, G1, G2, and all other classes of small engines All engines	2.50		2. 90	\$3. 25 3. 20 2. 87	\$2.70 2.65 2.32	\$\begin{cases} 4\\$3.00 \\ 62.95 \\ 2.95 \\ 2.62 \end{cases}\$	\$2.87 2.87 2.87 }	\$3.50 3.45 3.12	6 \$0. 22	6 \$0. 27

		1 .				
					Ra	te.7
	Yard se	ervice.			1907	1912
Kansas City, East St. Louis, and All other yards	l Chicago				\$2.25 2.15	\$2.50 2.40
Cla	ss of service.			Rate per—	1907	1912
Carrollton branch Watching engine. Deadheading. Pusher service§ Making up trains.			 	Hour Mile	\$2.40 .27 .0126 75.00 .22	\$2.70 .33 .028 84.00 .27

<sup>1</sup> Includes all engines for which comparable data are given in the rate schedules before and after award.
2 Day's work, 1907, 8 hours; 1912, 8 hours or less, 100 miles or less. Delays of more than 2 hours beyond schedule time when exceeding 8 hours paid for pro rata.
3 10 hours or less, 100 miles or less constitute a day's work, overtime pro rata.
4 Applies to H1 and H2.
5 Applies to I1, 12 and I3.
6 Per hour.
7 10 hours or less constitute a day overtime pro rate.

7 10 hours or less constitute a day, overtime pro rata.
 8 10 hours or less constitute a day's work. Overtime, per hour: 1907, 27 cents; 1912, 28 cents.

9 In addition to pay for trip.

Note.—Mallet type engines, 1912, rates of firemen all classes of service, \$4; Mikado type, \$3.75 per day of 100 miles or less; 25 cents per day additional on Mikado type in local freight service.

## CHICAGO, BURLINGTON & QUINCY RAILROAD CO.

On the Chicago, Burlington & Quincy Railroad, rates paid to firemen in passenger service were, as can be seen from the following table, advanced by the arbitration award 5.2 to 10 per cent a day, according to different classes of engines. In through freight service rates were increased 30 cents a day, and in local freight service, 35 cents a day, being equivalent to increases, according to different types of engines, of 9.1 to 12.3 per cent. Switching rates were advanced 2.5 cents an hour, or 11.4 per cent. Work train and helper service rates were increased 9.8 to 12.5 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

		P	assenger.			Thre	ough freigh	t.	
Class of engine.		e per	Incr	ease.		per ly.	Incr	ease.	
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	
Group 1: A 2, 3, 4, 5, K6, I1 Group 2: A1, D2, K 7, 9, H 1, 2, R1 Group 3: A6, K 1, 2, 3 Group 4: H 3, 4, R 2, 3, D7. Group 5: K 4, 5, P 1, 2, 3, 4 Group 6: D 3, 4, L, R 4, 5	\$2, 25 2, 50 2, 50 2, 70 2, 70 2, 70 2, 90	\$2. 40 2. 65 2. 75 2. 85 2. 95 3. 05	\$0. 15 . 15 . 25 . 15 . 25 . 15	6. 7 6. 0 10. 0 5. 6 9. 3 5. 2					
Group 1: A 1, 2, 3, 4, 5, K 6, 9, H5, II. Group 2: A6, D2, K1, 2, 3, 7, H 1, 2, R1 Group 3: H 3, 4, K 4, 5, P 1, 2, 3, 4,					\$2.65 2.85	3, 15	\$0.30 .30	11.3	
Group 4: D 3, 4, L, R 4, 5, S1					3.00	3. 30 3. 60	.30	10. 0 9. 1	
trip	• • • • • •				3. 13	3. 43	.30	9.6	
		Lo	cal freight.			S	Switching.		
Class of engine.		e per	Incr	ease.		e per ur.	Incr	ease.	
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	
Group 1: A 1, 2, 3, 4, 5, K 6, 9, H5, I1. Group 2: A6, D2, K 1, 2, 3, 7, H 1, 2, R1 Group 3: H 3, 4, K 4, 5, P 1, 2, 3, 4,	\$2. 85 3. 05	\$3. 20 3. 40	\$0.35 .35	12. 3 11. 5				••••••	
R 2, 3, D7 Group 4: D 3, 4, L, R 4, 5, S1 All engines, average rate for all yards	3. 20 3. 50	3. 55 3. 85	.35	10. 9 10. 0	\$0. 22	\$0, 245	\$0.025	11.4	
		S	uburban.		1	Work t	rain and h	elper.	
Class of engine.		e per	Incr	ease.		e per	Incr	ease.	
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	
All engines: Average rate for specified trips. Pullman Avenue, St. Paul. Group 1 engines. Group 2 engines. Group 3 engines. Group 4 engines.	2. 55	2. 70	.15	4.6 5.9	\$2.40 2.60 2.75 3.05	\$2.70 2.90 3.05 3.35	\$90.30 .30 .30 .30	12.5 11.5 10.9 9.8	

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

,	East Winona to Winona; East Dubuque to Dubuque; Galena Junction to Galena.  Hannibal-Palmyra Jun Quincy Run: Groups is							
Class of engine.	Rate		Incr	ease.	Rate		Incr	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
All engines	\$2.50	\$2.65	\$0.15	6.0	\$2.60	\$2.75	\$0.15	5.
	Avera	age rat	e for speci	fied trips.	N	Few Ca	stle to Can	ıbria.
Class of engine.		e per	Incr	ease.		e per	Incr	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
All engines	\$3.16	\$3.46	\$0.30	9.5	\$75.00	\$75.00	\$0.00	0.0

## Rates of pay of locomotive firemen.

Class of engine.		ger (per y).1	Class of engine.	Passenge day	
,	1907	1911		1907	1911
Group 1:			Group 4:		
A 2, 3, 4, 5	\$2.25	\$2,40	H 3, 4	\$2,70	\$2,85
K6	2, 25	2, 40	R 2, 3	2, 70	. 2, 85
Ti	2, 25 2, 40		D7	2.70	2, 85
Group 2:			Group 5:		
A1	2, 50	2.65	K 4, 5	2.70	2, 95
D2	2,50	2, 65	P 1, 2, 3, 4	2.70	2, 95
K 7, 9	2, 50	2.65	Group 6:		
H 1, 2	2, 50	2, 65	D 3, 4	2, 90	3, 05
R1	2, 50	2,65	L	2, 90	3. 05
Group 3:			R 4, 5, S1	2, 90	3. 05
A6	2, 50	2, 75	Consess Fr. O.1		3, 20
K 1, 2, 3	2.50	2.75			4, 00

Class of engine.	Through (per c	freight lay).2		Local freight (per day).2		
•	1907	1911	1907	1911		
Group 1:						
A 1, 2, 3, 4, 5	\$2.65	\$2.95	\$2.85	\$3.20		
K 6, 9	2.65	2.95	2.85	3.20		
H5		2.95	2.85	3.20		
I1	2.65	2.95	2.85	3.20		
Group 2:	2.85	3.15	3.05	3.40		
D2		3. 15	3. 05	3.40		
K 1, 2, 3, 7.		3. 15	3, 05	3.40		
H 1, 2,		3.15	3.05	3.40		
R1	2.85	3.15	3.05	3.40		
Group 3:	1					
Ĥ 3, 4		3.30	3.20	3.55		
<u>K</u> 4, 5	3.00	3.30	3.20	3.55		
P 1, 2, 3, 4	3.00	3.30	3. 20 3. 20	3.55		
R 2, 3, D7	3.00	3.30	3.20	3.55		
Group 4: D 3, 4:	3, 30	3, 60	3,50	3, 85		
I		3, 60	3, 50	3, 85		
R 4, 5		3, 60	3.50	3.85		
S1		3.60	3.50	3.85		
Group 5: O1		3.75		4.00		
Group 6: T 1, 2		4.00		4.25		

 <sup>1 100</sup> miles or less, 10 hours or less, 1 day. Delays of 1 nour or more in starting from or after arriving at a terminal paid at hourly rates for all time in excess of 1 hour.
 2 100 miles or less, 10 hours or less, 1 day; overtime pro rata.

# Rates of pay of locomotive firemen—Continued.

CI	ass of engi	ne.		Work (per d			pers (per day). <sup>2</sup>
	400 01 01164			1907	19	11 1907	1911
Group 1 engine				\$2, 40 2, 60 2, 75 3, 05	2 3 3 3	.70 \$2.4 .90 2.6 .05 2.7 .35 3.0 .00	2. 90 3. 05 3. 35 3. 60
						1907	1911
Pay trains	case of obs	truction or	impairment of trac	k, then h	alf	3 \$2, 40 . 24	\$3. 20 <sup>3</sup> 2. 55 . 255
						1907 (per hour).	1911 (per hour).
First-class yards		G SERVICE.			• • • •	\$0, 225 , 215	\$0. 25 . 24
						1907 (per hour).	1911 (per hour).
Chicago to Riverside Chicago to Downer's Grove Pullman Avenue-St. Paul		N SERVICE.		•••••		\$0.43 .65 6 2.55	\$0.45 .68 62.70
Specified runs.	1907	1911	Specified r	nns.		1907	1911
East Winona to Winona; East Dubuque to Dubuque; Ga- lena Junction to Galena 7 Hannibal to Palmyra Junc- tion, Quincy run: Group 1 Group 2 Hot Springs and Winnekahta 8 Spearish to Deadwood and return 9	\$2.50 2.50 2.70 3.05 3.60	\$2, 65 2, 65 2, 85 3, 35 3, 90	Deadwood Central Black Hill & Fort J New Castle to Can Denver to Lyons a Freight group Freight group Freight group	Pierre R. abria <sup>11</sup> nd return 1 2.	R.10 1: 12	\$3.00 3.00 75.00 3.10 3.10 3.20	\$3.30 3.30 75.00 3.40 3.40 3.50

1 10 hours or less, 1 day; overtime pro rata.
2 100 miles or less, 10 hours or less, 1 day; overtime pro rata.

Minimum rate.
All engines per single trip.
One day's pay for Sunday and holiday work allowed on suburban runs, which are arranged so that men can make but one round trip.

nen can make but one round trip.

6 Per day.

7 Passenger run, per day of 10 hours; all class of engines, overtime paid pro rata.

8 Including extra trips.

9 All class of engines.

10 Overtime after 10 hours.

11 Straight time for working days and extra time for Sundays; overtime after 10 hours, 1911.

12 Including switching and hostlering at Lyons.

#### CHICAGO GREAT WESTERN RAILROAD CO.

Firemen employed in through freight, helper, and work train service on the Chicago Great Western Railroad had their rates advanced by the award of the arbitration board 30 cents a day, or 9.8 to 11.8 per cent, according to different types of engines. Passenger train firemen were granted an advance of 15 cents a day, which, when applied to rates paid before the arbitration on different types of engines, was equivalent to an increase of 5.7 to 6.5 per cent. In yard service the increase of 25 cents a day when allowed by the board when applied to rates paid on this railway was equivalent to advances of 11.4 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Stand		ines under nders.	18-inch	Standar	d engine	s 18 inches	and over.
Class of service.	Rate p	er day.	Incr	ease.	Rate p	er day.	Incr	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
Passenger Through freight. Way freight. Helper. Work. Yard (average for all yards) St. Paul and Minneapolis	\$2. 30 2. 55 2. 75 2. 55 2. 55 2. 20 2. 50	\$2, 45 2, 85 3, 10 2, 85 2, 85 2, 45	\$0. 15 . 30 . 35 . 30 . 30 . 25	6.5 11.8 12.7 11.8 11.8 11.4	\$2.50 2.55 2.75 2.55 2.55 2.20	\$2. 65 2. 85 3. 10 2. 85 2. 85 2. 45	\$0. 15 . 30 . 35 . 30 . 30 . 25	6. 0 11. 8 12. 7 11. 8 11. 8 11. 4
transfer De Kalb and Cedar Falls branches	2. 50 2. 55	2. 75	.30	10.0	2.50 2.75 2.55 2.85		.30	10.0

		Mogu	l engines.		10-wh	eel, or	Prairie en	gines.	Cor	nsolida	ation engines.			
Class of service.		Rate per day. Increase.		Increase.		Increase. Rate per day. Rate per day.				Increa	ise.			
	1907	1911	Amount	Per cent.	1907	1911	Amount	Per cent.	1907	1911	Amount	Per cent.		
Passenger Through freight. Way freight. Helper Work Yard (average for all yards). St. Paul and Minneapolis transfer De Kalband Cedar Falls branches.	\$2.50 2.75 2.95 2.75 2.75 2.20 2.50 2.55	\$2.65 3.05 3.30 3.05 3.05 2.45 2.75 2.85	\$0.15 .30 .35 .30 .30 .30 .25 .25	6. 0 10. 9 11. 9 10. 9 10. 9 11. 4 10. 0 11. 8	\$2.65 2.95 3.15 2.95 2.95 2.20 2.70 2.55	\$2.80 3.25 3.50 3.25 3.25 2.45 2.95 2.85	\$0. 15 .30 .35 .30 .30 .25 .25	5.7 10.2 11.1 10.2 10.2 11.4 9.3 11.8	\$3. 05 3. 25 3. 05 3. 05 2. 20 2. 70 2. 55	\$3. 35 3. 60 3. 35 3. 35 2. 45 2. 95 2. 85	\$0.30 .35 .30 .30 .25 .25	9.8 10.8 9.8 9.8 11.4 9.3 11.8		

Rates of pay per day of locomotive firemen.

,		Stan	1		Мо	gul.	l. 10-wheel or Prairie.		Consolida-		24-inch cylinders and over, 1911.		
Class of service.	18-i	der nch iders.	cyli	nch nders over.							super-	nt su-	1911.
	1907	1911	1907	1911	1907	1911	1907	1911	1907	1911	With sup heater.	Without su- perheater.	Mallet, 1911.
Passenger Freight, through Freight, way Helper Work St. Paul and Minne- apolis transfer. Mixed transfer, serv- ice between Coun- cil Bluffs and	\$2. 30 2. 55 2. 75 2. 55 2. 55 2. 55 2. 50	\$2. 45 2. 85 3. 10 2. 85 2. 85 2. 75	\$2.60 2.55 2.75 2.55 2.55 2.55 2.55	\$2.65 2.85 3.10 2.85 2.85 2.75	\$2.50 2.75 2.95 2.75 2.75 2.75 2.50	\$2.65 3.05 3.30 3.05 3.05 2.75	\$2.65 2.95 3.15 2.95 2.95 2.70	\$2. 80 3. 25 3. 50 3. 25 3. 25 3. 25 2. 95	\$3. 05 3. 25 3. 05 3. 05 3. 05	\$3. 20 3. 35 3. 60 3. 35 3. 35 2. 95	\$2. 80 3. 25 3. 50 3. 25 3. 25 3. 25 2. 95	\$3.75 3.75 4.00 3.75 3.75 3.75	\$4.00 4.00 4.20 4.00 4.00 4.00
South Omaha. and on Chicago "horn run"  De Kalb and Cedar Falls branches Switching:	2. 55	2. 70 2. 85	2. 55	2. 70 2. 85	2. 55	2. 70 2. 85	2. 55	2. 85 2. 85	2. 55	2. 85 2. 85	2.85 2.85	3.45	4.00
Group 1 yards All other yards		2. 50 2. 40	2. 25 2. 15	2. 50 2. 40	2. 25 2. 15	2. 50 2. 40	2. 25 2. 15	2. 50 2. 40	2. 25 2. 15	2. 50 2. 40	2. 50 2. 40	2. 50 2. 40	4.00

Note.—100 miles or less, 10 hours or less, constitute the basis of a day's work.

## CHICAGO, MILWAUKEE & ST. PAUL RAILWAY CO.

On the Chicago, Milwaukee & St. Paul Railway it was possible from the printed schedules to compare the rates of pay on eightwheel engines only before and after the award of the arbitration board. The advances in daily rates of pay granted by the board when applied to the rates prevailing on this class of locomotives before the award show an increase of 6 per cent to passenger firemen, of 12 per cent to firemen in through freight, and work train service, of 15.1 per cent in way freight train service, and of 11 per cent in switching service.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	8-wheel engines.1						
Class of service.	Rate p	er day.	Incr	Increase.			
	1907	1912	Amount.	Per cent.			
Passenger Freight Way freight Work Switching 2	\$2. 50 2. 50 2. 65 2. 50 2. 275	\$2, 65 2, 80 3, 05 2, 80 2, 525	\$0.15 .30 .40 .30 .25	6. 0 12. 0 15. 1 12. 0 11. 0			

<sup>1</sup> Comparable data for other classes of engines in the service not available.

<sup>2</sup> Average for all yards.

## Rates of pay of locomotive firemen.

Class of service.	Rate per—	8-whe engi	el, all nes.	Overtime, per		
		1907	1911	1907	1911	
Passenger	100 miles or less, 10 hours or less.	<b>\$2.</b> 50	<b>\$2.6</b> 5	\$0. 25	<b>\$0.</b> 265	
FreightWay freight	do	2. 50 2. 65	2. 80 3. 05	. 25	. 28	
Wark. Switching:	do	2. 50	2. 80	. 25	.305 .28	
First-class yards Second-class vards	10 hours or less	2.30 2.25	2, 55 2, 50	. 23	. 255	

Note.—Rates of pay are classified according to seven different classes of engines, both before and after award. Only the rates on "8-wheel, all engines," are presented in the official schedules in comparable form.

Engine dispatchers, 12-hour day:

1907. \$2. 70
1911. 2. 95

# CHICAGO, ROCK ISLAND & PACIFIC RAILWAY CO. AND CHICAGO, ROCK ISLAND & GULF RAILWAY CO.

Firemen employed in passenger service by the Chicago, Rock Island & Pacific Railway Co. and the Chicago, Rock Island & Gulf Railway Co. had, by the award of the arbitration board, their rates of pay increased 15 cents a day, or from 4.9 to 6 per cent, according to class of engines. On coal-burning locomotives in through freight service the rates of pay to firemen were advanced 30 cents a day, and on Mogul engines 40 cents a day, or from 9.1 to 14.8 per cent, according to classes of locomotives. On oil-burning locomotives in the same branch of service the rate of increase granted was 15 cents a day, which was equivalent to advances of 4.5 to 5.9 per cent over the daily rates of pay before the award of the board. In local freight service practically the same increases were allowed as in the case of through freight service. On switching engines advances in rates of pay were made ranging from 10.6 to 11.6 per cent, and in snow-plow service an increase of 30 cents a day, or 12 per cent, was granted. Firemen engaged in Chicago suburban passenger service had their rates of pay increased 15 cents a day, or 5.2 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

								-						
		Passe	nger.		T	hrough	freigh	t.	]	Local f	reight.			
Class of engines.	Rate	per y.	Incre	ase.	Rate da	per y.	Incre	ase.	Rate da	per y.	Incre	ase.		
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.		
8-wheel: 18-inch cylinders and under— Coal	\\$2.50	\$2.65	<b>\$</b> 0.15	6.0	<b>\$</b> 2. 55	\$2.85 2.70	<b>\$</b> 0.30	11.8	}\$2.75	\$3.05 2.90	\$0.30	10.9 5.5		
Oil. 19-inch cylinders— Coal Oil. 19 to 21 inch cylinders, with trailer (Atlan-	2.60	2.75	. 15	5.8		{ 2.90 { 2.75		1		$\left\{ \begin{array}{l} 3.10 \\ 2.95 \end{array} \right.$		10.7 5.4		
with trailer (Atlantic)— Coal Oil 6-wheel connecting:	2.70	2.85	. 15	5.6	2.70	{ 3.00 2.85	.30 .15	11.1 5.6	2.90	$\begin{cases} 3.20 \\ 3.05 \end{cases}$	.30	10.3 5.2		
18 and 19 inch cylin- ders— Coal	2.70	2.85	. 15	5.6	2.80	$\left\{ \begin{array}{l} 3.10 \\ 2.95 \end{array} \right.$	.30	10.7 5.4	3.00	{ 3.30 3.15	.30	10.0 5.0		
18 and 19 inch cylinders (Mogul)— Coal Oil 20 to 22 inch cylinders—	} 2.70	2.85	. 15	5.6		$\left\{ \begin{array}{l} 3.10 \\ 2.85 \end{array} \right.$				$\begin{cases} 3.20 \\ 3.05 \end{cases}$		10.3 5.2		
Coal	2.95	3.10	. 15	5.1	3.00	3.30 3.15	.30	10.0 5.0	3.20	{ 3.50 3.35	.30	9.4 4.7		
Consolidation: 20 and 21 inch cylin-	2.95	3.10	.15	5.1	3.00	{ 3.30 3.15	.30	10.0 5.0	3.20	{ 3.50 3.35	.30 .15	9.4 4.7		
ders— Coal Oil 22 and 23 inch cylinders—	3.05	3.20	. 15	4.9	3.05	{ 3.35 3.20	.30	9.8 4.9	3.25	{ 3.55 3.40	. 30 . 15	9. 2 4. 6		
CoalOil	3.05	3.20	. 15	4.9	3.30	{ 3.60 3.45	.30 .15	9.1 4.5	3.50	{ 3.80 3.65	.30 .15	8.6		
	ice	betwe l Oak	ourban een Ch Fores in 13 h	icago st (if		Swite	ching.			Snow	plow.			
Class of engines.		e per	Incr	ease.		e per	Incr	ease.	Rate	e per	Incre	ease.		
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.		
All classes of engines 18-inch cylinders and under. 19 and 20 inch cylinders 21-inch cylinders and over Snowplow					\$2.15 2.25 2.35	\$2.40 2.50 2.60	\$0.25 .25 .25	11.6 11.1 10.6	\$2.50	\$2.80	\$0.30	12.0		

<sup>&</sup>lt;sup>1</sup> Rates fixed in 1910 also apply to 6-wheel connecting 23-inch cylinder engines with trailer (Pacific).

## Rates of pay of locomotive firemen.

		Passe	enger.	Thro	ugh fre	ight.1	Loc	alfreig	ht.1
Class of engine.	Rate per—		1010	1000	19	10	4007	19	10
		1907	1910	1907	Coal.	Oil.	1907	Coal.	Oil.
8-wheel: 18-inch cylinders and under.	100 miles or less; overtime pro	<b>\$</b> 2.50	\$2.65	\$2.55	\$2.85	\$2.70	\$2.75	\$3.05	\$2.90
19 to 21 inch cylinders, with trailer (Atlantic).	do	2.60 2.70	2.75 2.85	2.60 2.70	2.90 3.00	2.75 2.85	2.80 2.90	3. 10 3. 20	2.95 3.05
6-wheel connecting: <sup>2</sup> 18 and 19 inch cylinders 18 and 19 inch cylinders (Mogul).	do	2.70	2.85 2.85	2.80 2.70	3.10 3.10	2.95 2.85	3.00 2.90	3.30 3.20	3.15 3.05
20 to 22 inch cylinders 20 to 22 inch cylinders, with trailer (Pacific).	do	2.95 2.95	3.10 3.10	3.00 3.00	3.30 3.30	3.15 3.15	3.20 3.20	3.50 3.50	3.35 3.35
Consolidation: 20 and 21 inch cylinders 22 and 23 inch cylinders 24-inch cylinders and over Mallet type, all classes of service.	do do do	3.05 3.05	3. 20 3. 20	3.05	3.35 3.60 3.75 4.00	3. 20 3. 45 3. 60 4. 00	3.25	3.55 3.80 3.95 4.00	3.40 3.65 3.80 4.00

Class of engine.	Chicago suburban service.8		
		1907	1910
All engines . Overtime, per hour		\$2.90 .24	\$3.05 .255
	Rate per—	1907	1910
Switching service: 18-inch cylinders and under 19 and 20 inch cylinders 21-inch cylinders and over Deadheading on company business Held after arrival of deadhead trip; 4	overtime pro rata. dodo.	\$2.15 2.25 2.35 .027	\$2.40 2.50 2.60 .03
36 hours, 1907. 24 hours, 1910.  Held in for snowplow service: For each 24 hours or less that they are held subject to orders.		2.70 2.50	3.00 2.80
	Day	2.70	3.00

<sup>1</sup> On work, gravel, and construction trains freight rates apply according to classification: 12 hours or less, 1 day, 1907; 10 hours or less, 1910. Over 100 miles on mileage basis; overtime pro rata.

2 Rate given for 1910 also applies to 6-wheel connecting 23-inch cylinder engines, with trailer (Pacific).

3 Between Chicago and Oak Forest (if done within 13 hours), 100 miles or less; additional miles pro rata.

4\$2.70 for each successive 36 hours, 1907; \$3 for each successive 24 hours, 1910.

## CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY CO.

On the Chicago, St. Paul, Minneapolis & Omaha Railway the daily rates of pay to passenger train firemen were advanced, according to types of locomotives, from 5.2 to 6 per cent. In through freight service the percentage of increase allowed ranged from 10 to 11.8 per cent. On practically all classes of engines the rate of increase of 30 cents a day, as in the case of through freight service, was granted to firemen engaged in way freight and work and wreck train and helper service. The daily rate of pay to firemen in yard service, based on an average for all yards and all classes of engines, was advanced from \$2.24 to \$2.49, or 11.2 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

	Engi	nes un	ler 18-inch	cylinders.	Engi		-wheel, 18- nders.	inch cyl-
Class of service.		e per	Incr	ease.		e per	Incr	ease.
	. 1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Passenger Freight. Way freight. Work and wreck Menomonie line Stillwater line Helper. Hudson helper	2.75 2.55 2.50 2.50	\$2.65 2.85 3.05 2.85 2.65 2.65 2.85 3.20	\$0.15 .30 .30 .15 .15 .30 .30	6.0 11.8 10.9 11.8 6.0 6.0 11.8 10.3	\$2.50 2.60 2.75 2.60 2.50 2.50 2.60 2.90	\$2.65 2.90 3.05 2.90 2.65 2.65 2.90 3.20	\$0.15 .30 .30 .15 .15 .30 .30	6.0 11.5 10.9 11.5 6.0 6.0 11.5 10.3
	8-wh	eel, 19	to 21 inch	eylinders.	8-	-wheel	with traile	er, G3.
Class of service.	Rate	e p <b>er</b> -	Incr	ease.		e p <b>er</b> ay.	Incr	ease.
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Passenger Freight Way freight Work and wreck Menomonie line Stillwater line Helper Hudson helper	2.60 2.75 2.60 2.50 2.50	\$2.65 2.90 3.05 2.90 2.65 2.65 2.90 3.20	\$0. 15 .30 .30 .30 .15 .15 .30 .30	6.0 11.5 10.9 11.5 6.0 6.0 11.5	\$2.65 2.75 2.95 2.75 2.65 2.65 2.75 2.90	\$2.80 3.05 3.20 3.05 2.80 2.80 3.05 3.20	\$0.15 .30 .25 .30 .15 .15 .30	5.7 10.9 8.5 10.9 5.7 5.7 10.9 10.3
	6-w		nsolidated h cylinders		6-wheel consolidated G1 and G2 engines.			
Class of service.		e per	Incr		te per ay. Increase.			
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Passenger Freight. Way freight. Work and wreck Menomonie line Stillwater line. Helper Hudson helper	\$2.65 2.80 3.05 2.80 2.65 2.65 2.80 3.20	\$2.80 3.10 3.35 3.10 2.80 2.80 3.10 3.50	\$0.15 .30 .30 .30 .15 .15 .30 .30	5. 7 10. 7 9. 8 10. 7 5. 7 5. 7 10. 7 9. 4	\$2.90 3.00 3.15 3.00 2.90 2.90 3.00 3.20	\$3.05 3.30 3.45 3.30 3.05 3.05 3.05 3.50	\$0. 15 .30 .30 .30 .15 .15 .30 .30	5. 2 10. 0 9. 5 10. 0 5. 2 5. 2 10. 0 9. 4
	6-	wheel	consolidate	ed, I1.	10	)-wheel	, with trai	ler, 12.
Class of service.	Rate da	e p <b>er</b>	Incr	eas <b>e.</b>		e per	Incr	ease.
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Passenger Freight Way freight Work and wreck Menomonie line Stillwater line Helper Hudson helper	3.00 3.15 3.00 2.90 2.90	3.30 3.45 3.30 3.05	\$0.15 .30 .30 .30 .15 .15 .30 .30	5. 2 10. 0 9. 5 10. 0 5. 2 5. 2 10. 0 9. 4	\$2.90 3.00 3.15 3.00 2.90 2.90 3.00 3.20	\$3.05 3.30 3.45 3.30 3.05 3.05 3.30 3.50	\$0. 15 .30 .30 .30 .15 .15 .30 .30	5. 2 10. 0 9. 5 10. 0 5. 2 5. 2 10. 0 9. 4

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

	Under 6-wheel consolidated 18 by 24 cylinders, and 6-wheel consolidated 18 by 24 cylinders or over.						
Class of service.	Rate pe	per day. Increase.					
	1907	1910	Amount.	Per cent.			
Yard <sup>1</sup> .  Itasca transfer <sup>2</sup> St. Paul, Minneapolis, and Minnesota transfer <sup>2</sup> .	\$2. 24 2. 65 2. 88	\$2, 49 2, 90 3, 13	\$0. 25 . 25 . 25	11. 2 9. 4 8. 7			

<sup>1</sup> Average rate for all yards and all engines.

Rates of pay per day of locomotive firemen.

Class of service.	inch	er 18- 1 cyl- lers.		el, 18- cyl- ers.	8-wheel, 19 to 21 inch cylinders.		8-wh with t	trailer
	1907	1910	1907	1910	1907	1910	1907	1910
Passenger¹ Freight¹. Way (reight¹. Work and wreck¹ Menomonie line (day and night)². Stillwater line (day and night)². Helpers³ Hudson helper⁴.	2.55 2.75 2.55 2.50 2.50 2.50 2.55	\$2.65 2.85 3.05 2.85 2.65 2.65 2.85 3.20	\$2.50 2.60 2.75 2.60 2.50 2.50 2.60 2.90	\$2.65 2.90 3.05 2.90 2.65 2.65 2.90 3.20	\$2.50 2.60 2.75 2.60 2.50 2.50 2.60 2.90	\$2.65 2.90 3.05 2.90 2.65 2.65 2.90 3.20	\$2. 65 2. 75 2. 95 2. 75 2. 65 2. 65 2. 75 2. 90	\$2.80 3.05 3.20 3.05 2.80 2.80 3.05 3.20
Class of service.	solid 18 to 1	el con- ated, l9inch iders.	solid		solid	neel con- dated, 10-w with t		trailer
	1907	1910	1907	1910	1907	1910	1907	1910
Passenger <sup>1</sup> Freight <sup>1</sup> Way freight <sup>1</sup> Work and freight <sup>1</sup> Menomonie line (day and night) <sup>2</sup> Stillwater line (day and night) <sup>3</sup> Helpers <sup>3</sup> Hudson helper <sup>4</sup>	2.80 3.05 2.80 2.65 2.65 2.80	\$2.80 3.10 3.35 3.10 2.80 2.80 3.10 3.50	\$2.90 3.00 3.15 3.00 2.90 2.90 3.00 3.20	\$3.05 3.30 3.45 3.30 3.05 3.05 3.30 3.50	\$2.90 3.00 3.15 3.00 2.90 2.90 3.00 3.20	\$3.05 3.30 3.45 3.30 3.05 3.05 3.30 3.50	\$2.90 3.00 3.15 3.00 2.90 2.90 3.00 3.20	\$3.05 3.30 3.45 3.30 3.05 3.05 3.50
Switch and transfer service. [Per day of 10 hours or less.]					whee solid 18 b	ler 6- l con- ated, by 24 ader.	solid 18 b cylii	el con- ated, by 24 nder over.
					1907	1910	1907	1910
First-class yards Other yards Itasca transfer St. Paul, Minneapolis, and Minnesota transfer					2.15	\$2.50 2.40 2.75 3.00	\$2.30 2.25 2.80 3.00	\$2.55 2.50 3.05 3.25

<sup>1</sup> Per 100 miles or less, 10 hours or less; overtime or overmiles paid for pro rata.
2 These rates include all overtime.
3 Per day of 10 hours or less.
4 Per day of 12 hours or less.

<sup>&</sup>lt;sup>2</sup> Average rate for all engines.

## CHICAGO TERMINAL TRANSFER RAILROAD CO.1

The table next presented shows the rates of pay to locomotive firemen in effect on the Chicago Terminal Transfer Railroad before and after the arbitration award of 1910, together with the amount and per cent of advances in rates made by that award.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

Class of service.	Rate p	er day.	day. Increase.				
Class of service.	1907	1912	Amount.	Per cent.			
Suburban passenger: Engines under 18-Inch cylinders. Engines 18-inch cylinders and over. Stransfer. Work train.	\$2. 25 2. 50 2. 25 2. 50 2. 25	\$2. 40 2. 65 2. 50 2. 75 2. 55	\$0. 15 . 15 . 25 . 25 . 30	6. 7 6. 0 11. 1 10. 0 13. 3			

## Rates of pay of locomotive firemen.

Class of service.	1907 1	1912 2
Suburban passenger: Under 18-inch cylinders. 18-inch cylinders, and over Switching. Transfer. Work train	\$2. 25 2. 50 2. 25 2. 50 2. 25	\$2.40 2.65 2.50 2.75 2.55

Note.—Exception to rates shown for 1912: Firemen firing engines 1966 to 1971, inclusive, allowed \$2.75 per day of 10 hours or less in any service; overtime pro rata, plus 30 minutes before leaving and 30 minutes after arrival to prepare engine for service. Firemen working the night yard engine used in switching and making up trains at Whiting allowed \$2.75 per day of 10 hours or less; overtime, pro rata.

Now known as the Baltimore & Ohio Chicago Terminal Railroad Co.

Per day of 100 miles or less; overtime pro rata.
 Per day of 10 hours or less; overtime pro rata after 10 hours.

## COLORADO & SOUTHERN RAILWAY CO.

The table which follows sets forth the amount and per cent of increase in rates of pay granted to locomotive firemen by the award of the arbitration board. The showing is made according to principal branches of services and different types of locomotives.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

Class of service.	Rate p	er day.	Increase.			
Class of service.	1907	1911	Amount.	Per cent.		
Passenger, minimum rate;						
Engines, under 18-inch cylinders	\$2.25	1 \$2.40	\$0.15	6.7		
Engines, 18-inch cylinders and over	2.50	1 2.65	.15	6.0		
Central City run	2.60	2.75	. 15	5.8		
South Park division:						
100 valley miles		2.40	.15	6.7		
44 mountain miles	2. 25	2.40	. 15	6.7		
Clear Creek district, all classes narrow gauge engines	2.60	2.75	.15	5.8		
Freight:						
8-wheel, 10-wheel, and Mogul engines, cylinders 18 inches	0.00	0.00	00	11 -		
and under, and engines 309 to 319, inclusive Engines from 320 to 331, inclusive, and consolidated engines	2.60	2. 90	. 30	11.5		
from 400 to 429, inclusive	2, 89	3, 19	. 30	10, 4		
Consolidated engines 451 to 455, inclusive, 600 to 649, in-	2.09	9, 19	. 30	10.4		
clusive.	3, 25	3, 55	. 30	9, 2		
South Park division—	0.20	0.00	. 00	0.2		
85 valley miles	2, 31	2, 61	. 30	13. 0		
44 mountain miles	2, 31	2. 61	.30	13.0		
Clear Creek district, all classes narrow gauge engines		3, 19	.30	10. 4		
South Park division—		0		2012		
Work train	2, 40	2, 70	.30	12, 5		
Specified runs	2, 50	2, 80	.30	12.0		
Denver and Morrison run	2.65	2.95	.30	11.3		
All other runs (except work trains)	2.31	2.61	.30	13.0		
Switching:						
Leadville yards		2.75	. 25	10.0		
All other yards	2. 25	2. 50	. 25	11.1		
Hostlers	2. 25	2. 30	.05	20.0		

<sup>&</sup>lt;sup>1</sup> With the following exceptions in 1911: On simple locomotives having cylinders 24 inches or over in diameter and on compound locomotives weighing 215,000 pounds or more on drivers in all classes of service, firemen paid \$3.75 per 100 miles or less.

<sup>2</sup> Rate per hour.

## Rates of pay of locomotive firemen.

Class of service.	Ra	ste.	Remarks.
Class of Service.	1907	1911	Technology,
Switching service, all yards, except Leadville.	\$2.25	\$2.50	Overtime pro rata after 10 hours, except at Leadville.
Passenger, minimum rate: Locometives under 18-inch cylinders	2, 25	1 2.40	These rates not applicable in Clear Creek district.
Locomotives 18-inch cylinders and over.	2.50	1 2, 65	Do.
Freight service: 8-wheel, 10-wheel, and Mogul engines, cylinders 18 inches and under; and locomotives from 309 to 319, inclusive.	2.60	2 2. 90	100 miles or less; overtime pro rata; standard- gauge service only.
Locomotives from 320 to 331, inclusive.	2.89	3. 19	For 100 miles or less, overtime pro rata after 10 hours.
Consolidated locomotives from 400 to 429, inclusive.	2.89	3. 19	Do.
Consolidated locomotives, 451 to 455, inclusive.	3. 25	3.55	Do.
Consolidated locomotives, 600 to 649, inclusive.	3.35	3.65	Do.
Consolidated locomotives, 520 to 531, inclusive.	3. 35	3.65	Do.
Hostler service, per hour	. 25	.30	
Freight service	2.89 2.60	3. 19 2. 75	Mileage and overtime as per tabulated schedule.
Central City passenger run. South Park division, passenger service: 3	2.60	2. 75	For 100 miles or less, overtime after 11 hours.
100 valley miles	2. 25 2. 25	2. 40 2. 40	Overtime pro rata after 8 hours. Do.
85 valley miles	2.31 2.31	2.61 2.61	Do. Do.
Work-train firemen	2.40	2.70	Overtime pro rata after 10 hours.
All other runs (except work trains) Como to London mine, round trip	2. 31 2. 50	2.61 2.80	Overtime pro rata after 8 hours. Overtime pro rata after 10 hours.
Pitkin and Baldwin run Denver and Morrison run	2, 50	2.80	Do.
Switching service:		2. 95	Overtime pro rata.
Denver yards	2. 25 2, 25	2.50 2.50	Overtime pro rata after 10 hours.
Como vards	2, 25	2.50	Do.
Leadville yards  All classes of service, Mallet engines	2.50	2. 75 4. 00	Do. Do.

<sup>1</sup> With the following exceptions in 1911: On simple locomotives having cylinders 24 inches or over in diameter, and on compound locomotives weighing 215,000 pounds or more on drivers. In all classes of service firemen receive \$3.75 per 100 miles or less.

<sup>2</sup> Firemen in local or way freight service under the rates fixed in 1911 paid a differential of 25 cents per day over the rate paid on the same class of engines in through freight service, except Mallet type engines. In 1911 firemen on regular work trains allowed full time as per class locomotives used at the class freight rates, less 25 cents, respectively.

<sup>3</sup> Overtime paid on all districts of South Park division at 28.5 cents per hour in 1907; pro rata in 1911.

### DULUTH, SOUTH SHORE & ATLANTIC RAILWAY CO. AND MINERAL RANGE RAILROAD CO.

The advances in rates of pay awarded to firemen on this railway by the board of arbitration are briefly summarized below. The variations in the percentages of increase in the different classes of service were due to the various classes of locomotives used in each branch of the service.

Increase per day.	
	Per cent.
Passenger service	5. 4 to 6. 5
Time-freight and work-train service	10. 2 to 11. 8
Snowplow and local service	9. 4 to 10. 7
Switching service	11.6
Hostlers	9.1

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	1				1					
		1	Passenger.			Time freight.				
Class of engine.		e per	Incr	ease.		e per				
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.		
Standard less than 18 by 24	\$2.30 2.50	\$2.45 2.65	\$0.15 .15	6. 5 6. 0	\$2.55 2.55	\$2.85 2.85	<b>\$0.</b> 30	11.8		
larger	2.50	2.65	.15	6.0	2.70	3.00	.30	11. 1		
pounds or less on drivers	2.65	2.80	. 15	5.7	2. 75	3.05	.30	10. 9		
Consolidations weighing 140,000 pounds or more on drivers	2.80	2.95	. 15	5. 4	2.95	3. 25	.30	10. 2		
	1				1		ork train.			
		Snow	olow and lo	cal.		V	ork train.			
. Class of engine.		Snown e-per ay.	olow and lo			e per		ease.		
. Class of engine.		e-per				e per		ease.		
Standard less than 18 by 24 Standard, 18 by 24 or larger	ds	e-per	Incr	ease.	.da	e per	Incr	Per cent.		
Standard less than 18 by 24	1907 \$2.80	e-per ay.	Incr Amount.	Per cent.	1907 \$2.55	e per 1910 \$2.85	Incr Amount.	Per cent.		
Standard less than 18 by 24	1907 \$2.80 2.80	e-per ay.  1910 \$3.10 3.10	Amount. \$0.30	Per cent.	1907 \$2.55 2.55	e per ny.  1910  \$2.85 2.85	Amount. \$0.30			

		S	witching.			Hostlers.			
Class of engine.		e per	Incr	ease.		e per	Increase.		
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.	
All engines.	\$2.15	\$2.40	\$0. 25	11.6	\$2.75	\$3.00	\$0. 25		

Note. - Trains 53, 54, 63, 64, and designated traveling switch engines receive an extra compensation of 8 cents a day.

Rates of pay per day of locomotive firemen.1

Class of engine.	Passe	enger.		me ght.		plow local.	Work	trains.	Swite	hing.	Host	tlers.
	1907	1910	1907	1910	1907	1910	1907	1910	1907	1910	1907	1910
Standard, less than 18 by 24. Standard, 18 by 24, or larger. Mogul and 10-wheel, 18 by	2. 50	\$2. 45 2. 65	2. 55	2.85	2. 80	3. 10	\$2.55 2.55	2.85				
24, or larger. Consolidations weighing 140,000 pounds or less on drivers.	2. 50	2. 65	2.70	3.00	2.95	3. 25	2.70	3.00				
Consolidations weighing 140,000 pounds or more on drivers	2.80	2. 95	2.95	3. 25	3. 20	3.50	2.95	3, 25	\$2. 15	\$2.40	\$2.75	\$3.00

<sup>1 100</sup> miles or less, 10 hours or less, constitute a day's work in road service; overtime computed on basis of 10 miles per hour. In switching service, 10 hours constitute a day's work; overtime after first 20 minutes at the same rate. Hostlers 12 hours per day.

NOTE.—Trains 53, 54, 63, 64 and designated traveling switch engines receive an extra compensation

of 8 cents per day.

#### EL PASO & SOUTHWESTERN SYSTEM.

By the application of the award of the arbitration board on this railroad, passenger train firemen were advanced 9.1 per cent on the Douglas and Benson division for a day of 100 miles or less, and on the Douglas and Tucumcari division 12.7 per cent. In freight service the rate of increase awarded to engines of the Decapod type was 14.5 per cent per day of 100 miles. In helper service the rate of increase was slightly more, or 14.9 per cent. Firemen on work trains were advanced 7.4 per cent per month, and on switching or yard engines 8.3 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	1				
Ologo of convice	Poto non	P	ay.	Increase.	
Class of service.	Rate per—	1906	1912	Amount.	Per cent.
Passenger: Douglas and Benson. Douglas and Tucumcari Freight, Decapod engines. Branch runs: Bisbee and Osborn. Tombstone and Fairbank. Arizona and Southern Mexico. Helper. Work train. Switching, or Fard.	Month do Day do Month	3. 45 125. 00 125. 00 3. 52 3. 35	\$3.00 3.10 3.95 134.00 134.00 3.82 3.85 112.80 97.50	\$0. 25 . 35 . 50 9. 00 9. 00 . 30 . 50 7. 80 7. 50	9.1 12.7 14.5 7.2 7.2 8.5 14.9 7.4 8.3

# Rates of pay of locomotive firemen.

Clear days in	Rate per—	Pa	ıy.	Over	time.
Class of service.	Class of Set vice.		1912	1906	1912
Passenger; 1 Douglas and Benson Douglas and Tucumcari. Freight; 1 All classes of engines except Decapods, western division. Main-line service 2. All classes of engines except Decapods, eastern division. District between Duran and Carrizozo. Decapods. Branch runs: Bisbee and Osborn 3 Tombstone and Fairbank 5.	do do do	2.75 3.30 3.25 3.45 125.00 125.00	3. 10 3. 75 3. 55 3. 95 134. 00 134. 00	\$0.35 .35	
A. & S. M. Helper service. Work train. Switching or yard service <sup>12</sup> .	Month 11	3.35 105.00	8 3.82 3.85 112.80 97.50	. 26 <sup>2</sup> / <sub>3</sub> (10)	(9) (10) (13)

<sup>1</sup> Miles in excess of 100, pro rata. 2 Except district between Duran and Carrizozo.

<sup>8 12</sup> hours or less constitute a day.

Overtime pro rata after 12 hours.
14 hours or less constitute a day.
Overtime after 14 hours, pro rata.

<sup>\*</sup>Overtime after 14 hours, pro rata.
766 miles or less constitute a day.
810 hours or less constitute a day.
9 Overtime pro rata after 10 hours.
11 Overtime after 12 hours at road rates.
12 6 working days, 12 hours for a day. If called to work Sunday, paid pro rata in addition to monthly pay; overtime after 12 hours, at same ratio.
11 11 hours or less constitute a day.
12 Overtime after 72 hours, at same ratio.
13 11 hours or less constitute a day.

<sup>13</sup> Overtime, pro rata.

### FORT WORTH & DENVER CITY RAILWAY CO.

Firemen on the Fort Worth & Denver City Railway had their rates advanced by the arbitration board award on all passenger engines, except the consolidation type, from 5.9 to 6.4 per cent. On consolidation locomotives the rates of increase awarded were 17 and 20.8 per cent, according to size of cylinders. In through and local freight service firemen's rates of pay were advanced 30 cents a day, or from 8.6 to 11.3 per cent as applied to the various types of engines. The daily rate to firemen on work trains was increased from \$2.40 to \$2.70, or 12.5 per cent, and on switching engines from \$2.15 to \$2.50, or 16.3 per cent. Day hostlers received an increase of 9.4 per cent, and night hostlers 8.8 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

		Passe	enger.		т	Through freight. Local freight.						
Class of engine.		e per	Incr	ease.		e per	Incr	ease.		e per	Incre	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
8-wheel engines, 17 and 18 inch cylinders	<b>\$2.</b> 35	\$2.50	\$0.15	6.4	\$2.65	\$2.95	\$0.30	11.3	\$2.85	\$3.15	\$0.30	10.5
10-wheel engines, 18 and 19 inch cylinders	2, 50	2.65	.15	6.0	2, 80	3.10	.30	10.7	3.00	3.30	.30	10.0
10-wheel, 20-inch cylinders and over	2.55	2.70	.15	5. 9	2.90	3. 20	.30	10.3	3.10	3.40	. 30	9.7
Consolidation engines, 20 by 28 inch cylinders	2.65	3.10	. 45	17.0	3.10	3.40	.30	9.7	3.30	3.60	.30	9.1
Consolidation engines, 22 by 28 inch cylinders	2. 65	3.20	. 55	20.8	3.30	3.60	.30	9.1	3.50	3.80	.30	8, 6

Claus di complete	Rate per—	Pay.		Increase.	
Class of service.	rate per—	1907	1911	Amount.	Per cent.
Switch engine, except Fort Worth 1	Daydo	\$2.40 2.15	\$2.70 2.50	\$0.30 .35	12. 5 16. 3
Hostlers: Day. Night	Monthdo	80, 00 85, 00	87.50 92.50	7.50 7.50	9. 4 8. 8

<sup>&</sup>lt;sup>1</sup> Fort Worth, \$2.25 per day, 1907.

# Rates of pay of locomotive firemen.

Class of engine.		ger (per	Through freight (per day).1		Local freight (per day).1	
	1907	1911	1907	1911	1907	1911
8-wheel engines, 17 and 18 inch cylinders.  10-wheel engines, 18 and 19 inch cylinders.  10-wheel engines, 20-inch cylinders and over.  Consolidation engines, 20 by 28 inch cylinders.  Consolidation engines, 22 by 28 inch cylinders.  Mogul engines, 18-inch cylinders.	\$2, 35 2, 50 2, 55 2, 65 2, 65	\$2. 50 2. 65 2. 70 3. 10 3. 20 2. 60	\$2.65 2.80 2.90 3.10 3.30	\$2. 95 3. 10 3. 20 3. 40 3. 60 3. 05	\$2.85 3.00 3.10 3.30 3.50	\$3. 15 3. 30 3. 40 3. 60 3. 80 3. 25

<sup>1 100</sup> miles or 10 hours constitute a day's work.

## Rates of pay of locomotive engineers—Continued.

Class of service.	Poto nois	Pa	y.	Overtime.1	
Class of service.	Rate per—		1911	1907	1911
Work train. Switch engine, except Fort Worth 2	Day	\$2.40 2.15		\$0.25	\$0. 27
Hostlers: 4 Day	Month	80.00	87. 50		
Night	do	85. 00	92. 50		

<sup>1 10</sup> hours or less constitute a day. If called upon to work Sunday, paid pro rata in addition to regular pay.

Fort Worth, \$2.25 per day, 1907.

After 10 hours pro rata.

Description:

## GULF, COLORADO & SANTA FE RAILWAY CO.

On the Gulf, Colorado & Santa Fe Railway, as can be seen from the following table, the rates of pay after the application of the award of the arbitration board were 6 to 6.7 per cent higher for firemen in passenger service; 4.9 to 5.5 per cent higher in through-freight service; 6 per cent higher on work trains; and more than 11 per cent higher in yard service.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Rate pe	er day.	Increase.	
Class of service.	1903	1911	Amount.	Per cent.
Passenger:				
Engines less than 18-inch cylinders	\$2, 25	\$2.40	\$0.15	6.7
Engines 18-inch cylinders or over (and less than 24-inch, 1911)	2, 50	2, 65	. 15	6, 0
Freight:1				
Engines 100,000 pounds or less on drivers	2, 75	2, 90	. 15	5, 5
Engines weighing more than 100,000 and less than 120,000		2.00		0.0
pounds on drivers.	2, 90	3, 05	. 15	5, 2
Engines weighing 120,000 pounds or more on drivers	3, 05	3, 20	.15	4.9
Work or construction trains	2. 50	2, 65	.15	6, 0
Switching:	2.00	2.00	. 10	0.0
	2, 25	2, 50	. 25	11.1
Yards in group 1				
Other yards	2. 15	2.40	. 25	11.6

On all local freight runs an allowance of 0.3 cent per mile additional to rates shown. NOTE.—Mixed runs paid through freight rates according to class of engines.

# Rates of pay of locomotive firemen.

Class of service.	Rate per—	Ia	у.	Overtime per hour.	
		1903	1911	1903	1911
Passenger:1					
	100 miles or less	\$2.25	\$2.40	<b>\$</b> 0. 225	\$0.24
Engines, 18-inch cylinders or over (and less than 24-inch, 1911).	do	2.50	2.65	. 25	. 265
Engines, 24-inch cylinders or over	do		3.75		. 375
	do	2.75	2.90	. 275	. 29
Engines, weighing more than 100,000 pounds and less than 120,000 pounds on drivers	do	2. 90	3.05	. 29	. 305
	do	3.05	3. 20	. 305	.32
Engines, 24-inch cylinders or over	10 hours or less	2.50	3.75 2.65	. 25	. 375 . 265
Switching: Yards in group 1	do	2. 25	2.50	. 225	. 25
Other yards.  Deadheading.	Day	2. 15 2. 75	2.40 2.90	. 215	. 24

1 Minimum rate for 100 miles or less.

<sup>&</sup>lt;sup>2</sup> On all local freight runs an allowance of 0.3 cent per mile additional to rates shown. Mixed runs paid through freight rates according to class of engine.

## HOUSTON EAST & WEST TEXAS RAILWAY CO. AND HOUSTON & SHREVE-PORT RAILROAD CO.

On the Houston East & West Texas Railway and on the Houston & Shreveport Railroad rates of pay to passenger train firemen were advanced, according to classes of engines, from 6 to 6.7 per cent by the award of the arbitration board. On coal-burning locomotives rates were increased 11.5 per cent in freight service and 12.2 per cent in work-train service. The rates of increase to firemen on oil-burning engines in both of these branches of service were one-half of those for coal burners. Firemen in first-class yards had their daily compensation increased 11.1 per cent and in other yards 11.6 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

Claratamata	Ratep	er day.	Increase.	
Class of service.	1907	1910	Amount.	Per cent.
Passenger: Engines having under 18-inch cylinders Engines having cylinders 18 inches and over Freight: Öil Coal Mixed trains Work trains: Öil Coal Yard: First-class Other	\$2.25 2.50 } 2.62 2.50 } 2.45 2.25 2.15	\$2.40 2.65 { 2.77 2.92 2.65 { 2.60 2.75 2.50 2.40	\$0.15 .15 .15 .30 .15 .30 .25 .25	6.7 6.0 5.7 11.5 6.0 6.1 12.2 11.1 11.6

# Rates of pay of locomotive firemen.

Class of any fire	Ratepe	er day.	Overtime, per hour.		
Class of service.	1907	1910	1907	1910	
Passenger: 1			}		
Engines having cylinders under 18 inches in diameter	2 \$2, 25	2 \$2, 40	\$0.25	\$0.24	
Engines having cylinders 18 inches and over in diameter	2 2, 50	2 2, 65	. 25	. 265	
Freight:1					
Ŏil	22.62	2 2. 77	. 26	. 277	
Coal	2 2. 62	$^{2}2.92$	. 26	. 292	
Mixed trains	22.50	$^{2}$ 2. 65	. 25	. 265	
Work trains:					
Oil	2.45	٤ 2. 60	. 245	. 26	
Coal	2.45	<sup>3</sup> 2. 75	. 245	. 275	
Yard:					
First-class	2.25	2.50	. 225	. 250	
Other	2.15	2.40	. 215	. 240	
Watching engine per day or night	1.50	1.50			

<sup>&</sup>lt;sup>1</sup> Minimum rate.

#### HOUSTON & TEXAS CENTRAL RAILROAD CO.

In the following table the effect of the application of the award of the arbitration board on the Houston & Texas Central Railroad may be readily seen and no detailed explanation or comment is necessary.

<sup>&</sup>lt;sup>2</sup> 100 miles or less.

<sup>10</sup> hours or less.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Rate p	er day.	Increase.	
Class of service.	1907	1910	Amount.	Per cent.
Passenger: Engines under 18-inch cylinders. Engines 18-inch cylinders and over. Freizht:	\$2. 25 2. 50	\$2.40 2.65	\$0.15 .15	6. 7 6. 0
Oil-burning engines Coal-burning engines Mixed trains, Lampasas branch Work train:		2.85 3.00 2.75	.15 .30 .30	5. 6 11. 1 12. 2
Oil-burning engines Coal-burning engines Yard:	2.45	2.60 2.75	.15 .30	6. 1 12. 2
First-class. Second-class. Firemen used as hostlers. Ennis & Waxahachie short run:		2, 50 2, 40 1 97, 50	. 25 . 25 7. 50	11.1 11.6 8.3
Emnis & Waxanachie short run: Under 18-inch cylinder engines. Over 18-inch cylinder engines.	2, 25	2. 40 2. 65	.15 .40	6.7 17.8

Per month.

# Rates of pay of locomotive firemen.

Rate pe	er dav.			
		Overtime, per hour.		
907	1910	1907	1910	
\$2. 25 2 2. 50	<sup>2</sup> \$2. 40 <sup>2</sup> 2. 65	\$0.25 .25	\$0. 24 . 265	
2 2. 70	2 2. 85	.30	. 285	
2 2. 70	<sup>2</sup> 3. 00 <sup>2</sup> 2. 75	.30	. 30 . 275	
8 2. 45	8 2. 60 8 2. 75	. 245	. 26	
			. 25	
2.15	8 2. 40	. 225	. 24	
		20	0.4	
2. 25	2. 40	. 22	. 24	
2 2 2 8 8	\$2. 25 2 2. 50 2 2. 70 2 2. 45 3 2. 45 3 2. 45 3 2. 25 3 2. 15 90. 00 2 . 25	\$2.25	\$2.25	

<sup>1</sup> Rates given are for short runs where compensation on a mileage basis does not exceed the rates given. Where mileage basis exceeds the rates given, mileage basis applies; 100 miles or less constitute a day's work. Twenty-two miles per hour basis for computing overtime where time on trip averages less than 22 miles per hour.

## ILLINOIS CENTRAL RAILROAD CO.

The following series of tables shows in great detail the effect of the application of the arbitration board award on the Illinois Central Railroad. In addition to the various branches of train service a further classification is made according to rates paid in the different classes of train service on main and branch lines. The comparison of rates before and after the arbitration board award is principally of value for the details shown and there are no unusual features which require comment or explanation.

One hundred miles or less.
 Ten hours or less.

<sup>4</sup> Per month.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

#### MAIN LINE.

		MAI	N LINE.					
		1	Passenger.				Freight.	
Class of engine.	Rat	e per ile.	Incr	ease.	Rate	e per ile.	Incr	ease.
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.
Pacific, 1031 class, 22½-inch cylinders. Atlantic, 1001 class, 20-inch cylinders. 10-wheel, 2001 class, 19½-inch cylinders.	Cents. 2.50 2.50	Cents. 2.85 2.80	Cents. 0.35 .30	14.0 12.0	Cents.	Cents.	Cents.	
Other classes of 18 and 19 inch cylinders Other classes less than 18-inch cylinders	2.50	2.75 2.70 2.45	. 25 . 20 . 20	10.0 8.0 8.9	3.15	3.45	0.30	9.5
Consolidation, 801 class. Consolidation and 12-wheel, 639 and 640 classes. Consolidation, 641 class.					3.01 3.00	3.31 3.30	.30	10.0
Consolidation and 12-wheel, 639 and 640 classes. Consolidation, 641 class. Consolidation, 651 class. Mogul, 541 class. 10-wheel, 1 class. Consolidation, 601 class. 10-wheel and Mogul, 301 and 401 classes. 10-wheel and Mogul, 18-inch cylinders. All 8-wheel: also, 10-wheel and Mogul, 18-inch cylinders.					3.00 2.95 2.90	3.30 3.25 3.20	.30 .30 .30	10.0 10.2 10.3
10-wheel and Mogul, 301 and 401 classes. 10-wheel and Mogul, 18-inch cylinders. All 8-wheel; also, 10-wheel and Mogul,					2. 90 2. 75 2. 65	3. 20 3. 05 2. 95	.30	10.3 10.9 11.3
under 18-inch cylinders					2.63	2.93	.30	11.4
			Mixed.			Lo	cal freight.	
Class of engine.	Rate	e per ile.	Incr	ease.	Rate	e per ile.	Incr	ease.
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.
Consolidation, 801 class	Cents. 2.56	Cents. 2.86	Cents. 0.30	11.7	Cents. 3.15	Cents. 3.70	Cents. 0.55	17.5
640 classes. Consolidation, 641 class Consolidation, 651 class Mogul, 541 class 10-wheel, 1 class. Consolidation, 601 class 10-wheel and Mogul, 301 and 401	2.56 2.56 2.56 2.56 2.56 2.56 2.56	2.86 2.86 2.86 2.86 2.86 2.86	.30 .30 .30 .30 .30 .30	11.7 11.7 11.7 11.7 11.7	3.01 3.00 3.00 2.95 2.90 2.90	3. 56 3. 55 3. 55 3. 50 3. 45 3. 45	.55 .55 .55 .55 .55	18.3 18.3 18.3 18.6 19.0 19.0
	2.56 2.48	2.86 2.78	.30	11.7 12.1	2.86 2.78	3.16	.30	10.5 10.8
10-wheel and Mogul, 18-inch cylinders. All 8-wheel; also, 10-wheel and Mogul, under 18-inch cylinders	2.46	2.76	.30	12.2	2.76	3.06	.30	10.9
		Wor	k and help	er.		W	ork train.	
Class of engine.		e per ile.	Incr	ease.	Rate	e per	Incr	ease.
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.
Consolidation, 801 class	Cents. 2.70	Cents. 3.00	Cents. 0.30	11.1	Cents. 2.90	Cents. 3.20	Cents. 0.30	10.3
640 classes. Consolidation, 641 class. Consolidation, 651 class. Mogul, 541 class.	2.70 2.61 2.61 2.55 2.55 2.61	3.00 2.91 2.91 2.85 2.85 2.91	.30 .30 .30 .30 .30 .30	11.1 11.5 11.5 11.8 11.8	2.76 2.75 2.75 2.70 2.65 2.65	3.06 3.05 3.05 3.00 2.95 2.95	.30 .30 .30 .30 .30	10.9 10.9 10.9 11.1 11.3 11.3
Consolidation, 601 class 10-wheel and Mogul, 301 and 401 classes 10-wheel and Mogul, 18-inch cylinders	2.36 2.36	2.66 2.66	.30	12. 7 12. 7	2.50 2.40	2.80 2.70	.30	12.0 12.5
All 8-wheel; also, 10-wheel and Mogul, under 18-inch cylinders	2.36	2.66	.30	12.7	2.38	2.68	.30	12.6

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

## BRANCH LINE.

		F	'assenger.				Freight.		
Class of engine.		e per	Incr	ease.		e per le.	Increase.		
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.	
Pacific, 1031 class, 22½-inch cylinders.	Cents. 2.35	Cents. 2.70	Cents. 0.35	14.9	Cents.	Cents.	Cents.		
Atlantic, 1001 class, 20-inch cylinders. 10-wheel, 2001 class, 191-inch cylinders. Other classes of 18 and 19 inch cylinders	2.35	2.65 2.60 2.55	.30 .25 .20	12.8 10.6 8.5					
Other classes less than 18-inch cylinders Consolidation, 801 class	2.25	2.45	. 20	8.9	3.00	3.30	0.30	10.0	
640 classes					2.85	3.16 3.15 3.15	.30 .30 .30	10.5 10.5 10.5	
Consolidation, 651 class Mogul, 541 class 10-wheel, 1 class					2.75	3.10 3.05	.30	10.7 10.9	
Consolidation, 601 class					2.75 2.60 2.53	3.05 2.90 2.83	.30 .30 .30	10.9 11.5 11.9	
All 8-wheel; also, 10-wheel and Mogul, under 18-inch cylinders					2.51	2.81	.30	12.0	
		Lo	cal freight			Wor	k and help	er.	
Class of engine.		e per ile.	Incr	ease.		e per ile.	Incr	ease.	
	1907	1912	Amount.	Per cent.	1907	1912	Amount.	Per cent.	
Consolidation, 801 class	Cents. 3.00	Cents. 3. 55	Cents. 0.55	18.3	Cents. 2.55	Cents. 2.85	.Cents. 0.30	11.8	
640 classes. Consolidation, 641 class Consolidation, 651 class		3.41 3.40 3.40	. 55 . 55	19. 2 19. 3 19. 3	2.55 2.46 2.46	2.85 2.76 2.76	.30	11.8 12.2 12.2	
Mogul, 541 class. 10-wheel, 1 class. Consolidation, 601 class.	2.80 2.75	3.35 3.30 3.30	. 55 . 55 . 55	19.6 20.0 20.0	2.40 2.40 2.46	2.70 2.70 2.76	.30	12.5 12.5 12.2	
10-wheel and Mogul, 301 and 401 classes 10-wheel and Mogul, 18-inch cylinders. All 8-wheel; also, 10-wheel and Mogul,	2.71	3.01 2.93 2.91	.30	11. 1 11. 4 11. 5	2.31 $2.31$ $12.21$ $22.31$	2.61 2.61 12.51	.30 .30 1.30	13.0 13.0 13.6	
under 18-inch cylinders	7			(	2.31	2 2.61	2.30	2 13.0	

		W	ork train.	
Class of engine.		e per ile.	Incr	ease.
	1907	1912	Amount.	Per cent.
Consolidation, 801 class Consolidation and 12-wheel, 639 and 640 classes. Consolidation, 641 class Consolidation, 651 class Mogul, 541 class 10-wheel, 1 class 10-wheel, 1 class 10-wheel and Mogul, 301 and 401 classes 10-wheel and Mogul, 18-inch cylinders. All 8-wheel; also, 10-wheel and Mogul, 18-inch cylinders.	2.60 2.60 2.55 2.50 2.50	3.05 2.91 2.90	Cents. 0.30 .30 .30 .30 .30 .30 .30 .30 .30 .	10.9 11.5 11.5 11.5 12.0 12.0 12.8 13.2 13.2

1 8-wheel.

<sup>2</sup> Mogul or 10-wheel.

Mixed service, freight rates.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

#### BRANCH LINE-Continued.

		Pa	by.	Increase.		
Class of service.	Rate per—	1907	1912	Amount.	Per cent.	
Switching: Chicago, East St. Louis, New Orleans, Memphis, Louisville, Cairo, Mounds, and Council Bluffs.	Day	\$2.25	\$2.50	\$0. 25	11.1	
All other yards	do	2.15	2.40	. 25	11.6	
Incline: Henderson and Majors, McClain and Evansyille.	do	2.15	2. 45	. 30	14.0	
Juli snow plow	Hour	.35	. 40	. 05	14.3	
Suburban: Average (Chicago runs) New Orleans. Irregular suburban or passenger	Day	2.39	. 83 1 3. 00 2. 45	.04 .61 .15	5.1 25.5 6.5	

<sup>&</sup>lt;sup>1</sup> 10 hours or less actual service. Overtime pro rata.

## Rates of pay per mile of locomotive firemen.

#### MAIN LINE.

Clàss of engine.	Passe	enger.	Frei	ight.	Miz	xed.		cal ght.		k and per.		ork in. 1
	1907	1912	1907	1912	1907	1912	1907	1912	1907	1912	1907	19122
Pacific, 1031 class, 22½-inch cylinders Atlantic, 1001 class, 20-inch	Cents. 2. 50	2.85	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
cylinders.  10-wheel, 2001 class, 19½-inch cylinders.  Other classes of 18 and 19	2.50 2.50	2. 80										
inch cylinders. Other classes less than 18- inch cylinders. Consolidation, 801 class	2.50 2.25	2. 70 2. 45	3, 15	3. 45	2, 56	2.86	3. 15	3, 70	2. 70	3.00	2.90	3. 20
Consolidation and 12-wheel, 639 and 640 classes Consolidation, 641 class Consolidation, 651 class			3. 01 3. 00 3. 00	3.31 3.30 3.30	2.56 2.56 2.56	2.86 2.86 2.86	3. 01 3. 00 3. 00	3. 56 3. 55 3. 55	2.70 2.61 2.61	3.00 2.91 2.91	2. 76 2. 75 2. 75	3. 06 3. 05 3. 05
Mogul, 541 class			2. 95 2. 90 2. 90	3. 25 3. 20 3. 20	2.56 2.56 2.56	2.86 2.86 2.86	2. 95 2. 90 2. 90	3. 50 3. 45 3. 45	2.55 2.55 2.61	2.85 2.85 2.91	2.70 2.65 2.65	3. 00 2. 95 2. 95
401 classes			2. 75 2. 65	3. 05 2. 95	2. 56 2. 48	2.86 2.78	2.86 2.78	3. 16 3. 08	2.36 2.36	2.66 2.66	2.50 2.40	2. 80 2. 70
and Mogul under 18-inch. Mikado, 1601 class			2.63	2. 93 3. 75	2.46	2. 76 3. 75	2.76	3.06 4.00	2.36	2. 66 3. 75	2.38	2. 68 3. 75

<sup>1</sup> Rates applicable when the mileage of a work train or helper engine exceeds 100 miles per trip.

<sup>&</sup>lt;sup>2</sup> Freight rates, work-train service. Overtime paid for pro rata at the rate of 10 miles per hour.

Work

Work and

100 miles or less, 10 hours

or less.

Do.

2,30

Local

# Rate of pay per mile of locomotive firemen.

#### BRANCH LINE.

Class of engine.	Pass	enger.	Fre	ight.	frei	ght.		per.		in.1
Class of engine.	1907	1912	1907	1912	1907	1912	1907	1912	1907	19122
Pacific, 1031 class, 223-inch cylinders. Atlantic, 1001 class, 20-inch cylinders. 10-wheel, 2001 class, 194-inch cylinders. Other classes of 18 and 19 inch cylinders. Other classes less than 18-inch cylinders. Consolidation, 801 class. Consolidation and 12-wheel, 639 and 640 classes. Consolidation, 641 class. Consolidation, 651 class. 10-wheel, 1 class. 10-wheel and Mogul, 301 and 401 classes. 10-wheel and Mogul, 18-inch. All 8-wheel, also 10-wheel and Mogul under 18-inch. Mixado, 1601 class.	2.35 2.35 2.35 2.25	2. 70 2. 65 2. 60 2. 55 2. 45	3. 00 2. 86 2. 85 2. 85 2. 75 2. 75 2. 60 2. 53 2. 51	3. 16 3. 15 3. 15 3. 10 3. 05 3. 05 2. 90 2. 83 2. 81		3. 55 3. 41 3. 40 3. 35 3. 30 3. 30 3. 30 3. 01 2. 93 2. 91	2.55 2.55 2.46 2.46 2.40 2.40 2.46 2.31 2.31	2. 85 2. 85 2. 76 2. 76 2. 70 2. 70 2. 76 2. 61 2. 61 2. 61 2. 61 4. 2. 61		
Class of service.			Rat	e per—		ay.	day'	sis of s work 7 and 912.	1907	time, and 12.
Switching: Chicago, East St. Louis, New Orlea Louisville, Cairo, Mounds, and Cor All other yards Incline: Henderson and Majors, McClain and Jull snow plow. Suburban: Chicago to Sixty-seventh Street and Chicago to South Chicago and return Chicago to Grand Crossing and return Chicago to Harvey and return. Chicago to Harvey and return. Chicago to Homewood and return. Chicago to Blue Island and return. Chicago to Blue Island and return Kensington to Blue Island and return Chicago to Burnside and return. Chicago to West Pullman and return Woodlawn to Flossmoor and return. New Orleans	méil B Evans return	Buffs.	ddddddddddddd	o	. 2.15 . 2.15 . 35 . 61 . 76 . 61 . 76 . 89 . 1.01 1.01 1.05 . 89 . 41 . 75 . 89 . 89	2.40 2.45 .40 .65 .80 .94 1.07 1.15 .94 .43 .79 .88 .88	dododododododododododododododo	ours or ss act- al serv-	Do D	

Irregular suburban or passenger......

Mixed service, freight rates.

#### INTERNATIONAL & GREAT NORTHERN RAILWAY CO.

Passenger train firemen on the International & Great Northern Railway, as can be seen from the table below had their rates of pay advanced by the arbitration board from 6 to 6.7 per cent. On coal-burning locomotives firemen in through freight service received an increase in rates of 10.5 to 11.1 per cent according to class of engine; in local freight service an advance of 9.2 to 9.8 per cent; in construction and work train service an advance of 12.5 per cent; and in switching service an advance of more than 11 per cent. When oil-burning locomotives were in use the increases in rates of pay granted were one-half of those allowed on locomotives which used

<sup>1</sup> Rates applicable when the mileage of a work train or helper engine exceeds 100 miles per trip.

<sup>&</sup>lt;sup>2</sup> Freight rates, work-train service. <sup>8</sup> 8-wheel.

<sup>4</sup> Mogul or 10-wheel.

Note.—Basis of day's work 100 miles or less. Overtime paid for pro rata at the rate of 10 miles per hour.

coal as fuel. Hostlers had their monthly rates of pay increased to the amount of \$7.50, or 8.6 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

CI A	Rate p	er day.	Incr	ease.
Class of service.	1907	1910	Amount.	Per cent.
Passenger:				
Engines, under 18-inch cylinders	\$2.25	\$2.40	\$6.15	6. 7
Engines, 18-inch cylinders and over	2, 50	2.65	.15	6.0
Through freight:				
Engines, 18-inch cylinders and under—				
Oil.	2.70	2.85	.15	5. 6
Coal	2.70	3.00	.30	11.1
Engines, 19-inch cylinders—				
Oil.	2.85	3.00	.15	5.3
Coal	2. 85	3.15	.30	10.5
Engines, 20-inch cylinders—				
Oil	3.05	3. 20	.15	4.9
Coal	3.05	3.35	.30	9.8
Local freight:				
Engines, 19-inch cylinders or under—				
Oil	3.05	3. 20	.15	4.9
Coal	3.05	3.35	.30	9.8
Engines, 20-inch cylinders—				
Oil	3. 25	3.40	.15	4.6
Coal	3. 25	3.55	.30	9. 2
Construction or work train:				
Oil	2.40	2.55	.15	6.3
Coal	2.40	2.70	.30	12.5
Switch engine:				
First-class yards	2. 25	2.50	. 25	11.1
Second-class yards	2.15	2.40	. 25	11.6
Hostlers	1 87. 50	1 95, 00	7.50	8, 6

<sup>1</sup> Rate per month.

# Rates of pay of locomotive firemen.

	Rate p	er day.	Overtime	per hour.
Class of service.	1907	1910	1907	1910
Passenger: 1	i			
Engines, under 18-inch cylinders	\$2. 25	\$2.40	\$0.30	\$0.40
Engines, 18-inch cylinders and over	2.50	2.65	.30	. 40
Phrough freight service: 1	1			
Engines with 18-inch cylinders or under—				
Oil	2.70	2.85	. 27	. 285
Coal	2.70	3.00	. 27	.30
Engines with 19-inch cylinders—	0.0#			
Oil	2. 85	3.00	. 285	. 30
Coal	2. 85	3.15	. 285	.315
Engines with 20-inch cylinders—	3, 05	3, 20	. 305	. 32
OilCoal	3.05	3. 35	. 305	. 335
Local freight: 1	5.05	0.00	. 500	• 006
Engines with 19-inch cylinders or under—				
Oil	3, 05	3, 20	.305	. 32
Coal	3.05	3, 35	.305	. 335
Engines with 20-inch cylinders—	0.00	0.00	1000	. 000
Oil	3, 25	3, 40	. 325	. 34
Coal	3, 25	3, 55	. 325	. 355
Construction or work train:2				
Oil	2. 40	2.55	. 25	. 258
Coal	2.40	2.70	. 25	. 27
Switch-engine firemen: 3				
First-class yards	2. 25	2.50	. 25	. 25
Second-class yards	2.15	2.40	. 25	. 25
Pusher:	50.15	5 O FF	0"	orr
Oil	<sup>5</sup> 2, 15	<sup>5</sup> 2. 55 <sup>6</sup> 2. 70	. 25	. 255
Coal Engine hostlers 4	6 87, 50	6 95, 00	. 25	7.30
Engine nostlers 1	9 87. DU	90, 00	. 20	, 30

<sup>1</sup> Basis of day's work, 100 miles or less.
2 Basis of a day's work, 100 miles or less, 10 hours or less.
3 10 hours or less, 1 day.
4 Hostlers acting as foremen receive \$10 additional salary.
6 Rate on "Austin pusher engine," 1910, "Pusher or helper engine," 1907.

<sup>7</sup> After 12 hours.

Note.—Firemen on light engines are paid as follows: 1907, 1910, section of passenger trains, passenger rates. Section of freight trains, freight rates.

## KANSAS CITY SOUTHERN RAILWAY CO.

Passenger train firemen on this railway, by the application of the award of the arbitration board, secured an advance of from 6 to 6.7 per cent in rates of pay on engines with cylinders less than 20 inches in diameter and of 12 per cent on engines with cylinders of a greater diameter than 20 inches. On coal-burning locomotives in through and local freight service rates of pay to firemen were increased from 9.2 to 11.5 per cent, according to the classification of engines. The advances on oil-burning locomotives in these classes of service were one-half of those made for coal burners. The rates in switching service were from 11.1 to 11.6 per cent higher after application of the award. To firemen in work train service an increase of 12.5 per cent was granted for coal-burning engines and of 10.9 per cent for engines which used oil as fuel. The pay of hostlers was advanced \$10 a month by the arbitration award, which was equivalent to an increase of 14.3 per cent for hostlers on the day shift, and 13.3 per cent for those on the night shift.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration effective May 16, 1910.

		F	'assenger.			Thr	ough freigh	ıt.
Class of engine.		e per	Incr		e per	Increase.		
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
Engines with cylinders 18 inches and under: Coal. Oil.		\$2.40 2.40	\$0.15 .15	6. 7 6. 7				
Engines with cylinders 18 to 20 inches: Coal. Oil. Engines with cylinders over 20 inches:		2. 65 2. 65	.15 .15	6. 0 6. 0				
Coal Oil	2, 50	2. 80	.30	12. 0 12. 0				
CoalOil					\$2.60 2.60	\$2.90 2.75	\$0.30 .15	11. 5 5. 8
Coal. Oil. 10-wheel engines, 20-inch cylinders					2. 75 2. 75	3. 05 2. 90	.30	10. 9 5. 5
and over: Coal. Oil. Engines having cylinders 21 by 30						3, 20 2, 90	.30	10.3 5.5
inches: Coal					3. 05 2. 91	3. 35 3. 06	.30	9. 8 5. 2
cylinders: Coal. Oil. Consolidation engines, 22 by 30 inch						3. 40 3. 06	.30	9. 7 5. 2
cylinders: Coal. Oil.						3. 45 3. 06	.30	9. 5 5. 2

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration effective May 16, 1910—Continued.

				-,				
		Lo	cal freight.			Swi	itching.	
Class of engine.	Rat	e per ay.	Inci	ease.	Rate	per y.	Incr	ease.
	1907	1911	A mount.	Per cent.	1907	1911	Amount.	Per cent.
All 8-wheel engines: Coal. Oil. 10-wheel and Mogul engines, 19-inch cylinders and under:	2. 85	\$3. 15 3. 00	<b>\$0.</b> 30 . 15	10. 5 5. 3				
Coal. Oil. 10-wheel engines, 20-inch cylinders and over:	2. 85	3. 15 3. 00	.30	10. 5 5. 3				
Coal	2, 85	3, 30 3, 00	.30	10. 0 5. 3				
Coal. Oil. Consolidation engines, 22 by 28 inch cylinders:	2.99	3, 45 3, 14	.30	9. 5 5. 0				
Coal. Oil. Consolidation engines, 22 by 30 inch cylinders:	2.99	3. 50 3. 14	.30					
Coal. Oil. Switch engines: Kansas City terminals—	2.99	3, 55 3, 15	.30				,	
Coal. Oil. All other points— Coal.					2. 25	\$2.50 2.50 2.40	\$0. 25 . 25	11. 1 11. 1 11. 6
ŎĬĬ.					2. 15	2. 40	. 25	11.6
		Bı	eaking-in.			Bra	nch runs.	
Class of engine.		e per	Incr	ease.	Rate	per y.	Incre	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
Breaking-in engines: 10 hours or over 5 hours, 100 miles or over 50 miles— Coal. Oil. All engines, branch service: Coal. Oil.	\$2.35 2.35	\$2. 40 2. 40	\$0.05 .05	2.1 2.1			\$0.30	12. 0
OII					2.50	2.65	.15	6.0
		W	ork trains.	. <u> </u>		H	Iostlers.	
Class of engine.	Rate da	e per ly.	Incr	ease.	Rat mo	e per nth.	Inci	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount	Per cent.
Engines with cylinders 18 inches and under: Coal. Oil	\$2.40 2.30	\$2.70 2.55	\$0.30 .25	12. 5 10. 9			-	
Oil. Engines with cylinders 18 to 20 inches: Coal. Oil. Engines with cylinders over 20 inches:	2. 40 2. 30	2. 70 2. 55	.30	12. 5 10. 9				
Ccal. Oil. Consolidation engines, 22 by 28 inch	2. 40 2. 30	2. 70 2. 55	.30	12. 5 10. 9				
Coal. Oil. All engines:	2. 50 2. 30	2. 80 2. 55	. 30	12. 0 10. 9				
Day hostlers—					ano -	000	04-	
Day hostlers— Coal. Oil. Night hostlers— Coal.			1		\$70.00 70.00 75.00	\$80.00 80.00 85.00	\$10.00 10.00	14.3 14.3

# Rates of pay per day of locomotive firemen.

	Passe	enger.	Through	afreight.	Localf	reight.	Swite	hing.
Class of engine.	1907	1911	1907	1911	1907	1911	1907	1911
Engines with cylinders—								
16 by 24—								
Coal	\$2.25 2.25	\$2.40 2.40						
Oil	. 2.20	2.40						
Coal	2.25	2.40						
Oil	2.25	2.40						
Coal	2.50	2.65						
Oil	2.50	2,65						
19 by 24— Coal.	2.50	2.65		6				
Oil	2.50	2.65						
19 by 26—	0.50							
Coal Oil.	2.50 2.50	2.65 2.65						
20 by 26	2.00	2.00						
Coal	2.50	2.65						
Oil	2.50	2.65						
Coal	2.50	2.80						
Oil	2.50	2.80						
22 by 28— Coal	2.50	2.80						
Oil	2.50	2.80						
22 by 30—								
Coal	2.50 2.50	2.80 2.80						
24 by 28—	2.00	2.00						
Coal	2.50	2.80						
Oil	2.50	2.80						
Coal			\$2.60	\$2.90	\$2.85	\$3.15		
Oil		·	2.60	2.75	2.85	3.00		
0-wheel and Mogul engines, 19-inch cylinders and under:								
Coal			2.75	3.05	2.85	3.15		
Oil			2.75	2.90	2.85	3.00		
0-wheel engines, 20-inch cylinders and over:								
Coal			2.90	3.20	3.00	3.30		
			2.75	2.90	2.85	3.00		
Compounds:			3.15		3.25			
Oil			2.91		2.99			
Mallet:				4.00		4 00		
Coal Oil				4.00		4.00		
Engines having cylinders 21 by 30:								
Coal			3.05	3.35	3.15	3.45		
Oil Consolidation engines:			2.91	3.06	2.99	3.14		
22 by 28 inch cylinders—								
Coal			3.10	3.40	3.20	3.50		
Oil			2.91	3.06	2.99	3.14		
Coal			3.15	3.45	3.25	3.55		
			2.91	3.06	2.99	3.15		
Switch engines: Kansas City terminals—								
Coal							\$2.25	\$2.
Oil							2.25	2.
All other points—							2.15	2.4
Oil							2.15	2.4

Rates of pay per day of locomotive firemen—Continued.

C1 4 1	Break	ing-in.	Branc	h runs.	Work	trains.	Hos	tlers.
Class of engine.	1907	1911	1907	1911	1907	1911	1907	1911
Engines with cylinders—								
16 by 24— Coal. Oil. 17 by 24—					\$2.40 2.30	\$2.70 2.55		
17 by 24— Coal					2.40 2.30	$2.70 \\ 2.55$		
Coal					2.40 2.30	2.70 2.55		
19 by 24— Coal. Oil. 19 by 26—					2.40 2.30	2.70 2.55		
19 by 20— Coal					2.40 2.30	2.70 2.55		
Coal					2.40 2.30	2.70 2.55		
Coal					2.40 2.30	2.70 2.55		
22 by 28 inch cylinders— Coal Oil					2.50 2.30	2.80 2.55		
22 by 30 inch cylinders— Coal					2.50 2.30	2.80 2.55		
Breaking-in engines: 10 hours or over 5 hours, 100 miles or over 50 miles—								
Coal Oil	\$2.35 2.35	\$2.40 2.40						
Branch service— CoalOil			\$2.50 2.50					
Hostlers— Day—							1 \$70.00 1 70.00	}1 \$80.00
Night— Coal. Oil.							1 75.00 1 75.00	) } 1 85.00

<sup>1</sup> Per month.

# MISSOURI, KANSAS & TEXAS RAILWAY CO. AND MISSOURI, KANSAS & TEXAS RAILWAY CO. OF TEXAS.

In the following table a comparison is made of the rates of pay of locomotive firemen before and after the award of the arbitration board. The comparisons, it will be noted, are mainly on the basis of the rate of pay per mile for the different branches of service and for the various classes of engines arranged according to the diameter of cylinders. In switching service, a comparison for firemen on the basis of a daily rate is shown, and for hostlers the comparison is made on a monthly compensation basis. The percentages of increase in rates are about the usual advances which resulted from the application of the award of the board of arbitration. The detailed comparison follows.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

		Pa	y.	Incr	ease.
. Class of service.	Rate per-	1909	1912	Amount.	Per cent.
Passenger:				,	
Engines, under 18-inch cylinders	Mile	\$0,0225	\$0,0240	\$0,0015	6, 7
Engines, 18-inch cylinders and under 20-inch	do	. 0250	. 0265	. 0015	6.0
Engines, 20-inch cylinders and over		. 0250	. 0280	.0030	12.0
Through freight:				1	
On 8-wheel engines. On 10-wheel and Mogul engines, 19-inch	do	. 0265	. 0295	.0030	11.3
On 10-wheel and Mogul engines, 19-inch	do	. 0280	.0310	.0030	10.7
cylinders and under.					1
On 10-wheel and Mogul engines, over 19-	do	. 0290	. 0320	. 0030	10.3
inch cylinders.					
On consolidation engines, 20 by 26 inch	do	. 0295	. 0325	. 0030	10. 2
cylinders.		0000	0000	0000	10.0
On consolidation engines, 21 by 26 and 20	ao	. 0300	. 0330	.0030	10.0
by 30 inch cylinders. On consolidation engines, 22 by 28 inch	do	. 0310	. 0340	. 0030	9. 7
cylinders.	ao	.0310	.0540	.0050	9. /
Way freight and mixed trains:					
On engines 19-inch cylinders and under	do	. 0290	. 0320	. 0030	10.3
On engines over 19-inch cylinders except	do	.0300	.0330	.0030	10.0
consolidation engines 22 by 28.		.0000	.0000	. 0000	10.0
On consolidation engines, 22 by 28 inch	do	. 0325	. 0355	. 0030	9, 2
cylinders.					
Work trains	Dav	2,40	2.70	. 30	12, 5
Switching:					
First-class yards	do	2.25	2.50	. 25	11.1
All other yards	do	2.15	2.40	. 25	11.6
Hostlers:					
Day		77.50	85.00	7.50	9.7
Night	do	82.50	90.00	7.50	9.1
Dennison Hill engine	Day	2.50	2.80	. 30	12.0

# Rates of pay of locomotive firemen.

	Rate	Pa	ıy	Over	time.
Class of service.	per—	1909	1912	1909	1912
Passenger:	3613		00.0040	41)	(0)
Engines, under 18-inch cylinders	1	\$0.0225	\$0.0240 ( 3.0265	(1)	(2)
Engines, 18-inch cylinders and over	do	. 0250	4.0280	(1)	(2)
Chrough freight: On 8-wheelengines. On 10-wheel and mogul engines, 19-inch cylin-	do	. 0265	.0295	(6)	(6)
ders and under	do	. 0280	.0310	(6)	(5)
On 10-wheel and mogul engines, over 19-inch cylinders. On consolidation engines, 20 by 26 inch cylinders. On consolidation engines, 21 by 26 and 20 by 30	do	. 0290	. 0320	(5) (6)	(6) (5)
inch cylinders. On consolidation engines, 22 by 28 inch cylinders. Way freight and mixed train:	do	.0300	.0330	(5) (6)	(6) (6)
On engines 19-inch cylinders and under On engines over 19-inch cylinders, except consoli-	do	. 0290	. 0320	(6)	(6)
dation engines, 22 by 28	do	. 0300	. 0330	(6)	(6)
On consolidation engines, 22 by 28 inch cylinders.	do	. 0325	. 0355	(6) (6)	(6) (6)
Work train	Day	2.40	2.70		
Switching: First-class yards	do	2.25	2.50	(6) (6)	(5) (5)
Second-class yards	00	2.15	2.40	(6)	(2)
Day Night			85. 00 90, 00	(7)	(7)
Dennison Hill engine			2.80	(8)	(7) (8) (9)
Deadheading			2.80	(9)	(9)

<sup>1 100</sup> miles or less constitute a day. Road overtime computed on a basis of 20 miles per hour, and paid for pro rata at mileage rates on basis of 10 miles for each hour earned. No road overtime allowed until 6 hours are consumed.

nours are consumed.

2 100 miles or less constitute a day. Road overtime computed on basis of 20 miles per hour, and paid pro rata at mileage rates on basis of 10 miles for each hour earned.

3 18 and 19 inch cylinders.

4 20-inch cylinders and over.

5 100 miles or less, 10 hours or less constitute a day. Road overtime allowed on basis of 10 miles per hour.

6 10 hours or less constitute a day; overtime pro rata; 30 minutes constitute the first hour.

7 Overtime after 12 hours.

8 Overtime after 10 hours.

9 Not allowed.

<sup>9</sup> Not allowed.

MISSOURI PACIFIC RAILWAY CO. AND ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY CO.

On the Missouri Pacific and St. Louis, Iron Mountain & Southern Railways the advances in rates of pay granted by the arbitration board to firemen were representative of the general application of the award. No noteworthy changes after the award are noticeable. The comparison of rates of pay before and after the arbitration proceedings together with the amount and per cent of increase in rates for the different branches of train service and the various classes of locomotives is clearly shown in the table below:

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Rate per	100 miles.	Incr	ease.
Class of service.	1907	1911	Amount.	Per cent.
Passenger:  8-wheel engine, cylinders under 18 inches  8 and 10 wheel engines, 18 and 19 inch cylinders  8 and 10 wheel engines, over 19-inch cylinders.  Through freight:  8-wheel engines  Mogul and 10-wheel engines, 19-inch cylinders or less.  Consolidation and 10-wheel engines, 20 by 24 inch cylinders.  Consolidation engines, 22 by 30 inch cylinders.  12-wheel engines, 21 by 32 inch cylinders.  Local freight:  8-wheel engines  Moguls and 10-wheel engines, 19-inch cylinders or less.  Consolidation and 10-wheel engines, 20 by 24 inch cylinders.  Local freight:  8-wheel engines  Moguls and 10-wheel engines, 19-inch cylinders or less.  Consolidation and 10-wheel engines, 20 by 24 inch cylinders.  Consolidation engines, 22 by 30 inch cylinders.  Lowheel engines, 21 by 32 inch cylinders.  12-wheel engines, 21 by 32 inch cylinders.  Swork and helper.  Switch:  First-class yards  Second-class yards	\$2. 25 2. 50 2. 65 2. 65 2. 80 2. 90 3. 05 3. 25 3. 30 3. 10 3. 10 3. 25 3. 45 3. 50 1. 2. 40	\$2. 40 2. 65 2. 80 2. 95 3. 10 3. 20 3. 35 3. 55 3. 60 3. 15 3. 30 3. 40 3. 55 3. 75	\$0.15 .15 .15 .30 .30 .30 .30 .30 .30 .30 .30 .30 .30	6.7 6.0 5.7 11.3 10.7 10.3 9.8 9.2 9.1 10.5 10.0 9.7 9.2 8.7 8.6 12.5
Hostler: Night service. Day service.		<sup>2</sup> 87. 60 <sup>2</sup> 82. 60	7. 60 7. 60	9. 5 10. 1

<sup>&</sup>lt;sup>1</sup> Per day of 10 hours or less; overtime after 10 hours' service.

<sup>3</sup> Per month; 12 hours or less constitute a day's work.

# Rates of pay of locomotive firemen.

	Per 100	miles.	Overtime	per hour.
Class of service.	1907	1911	1907	1911
Desgarran				
Passenger: 8-wheel engines, cylinders under 18 inches	\$2, 25	\$2,40	\$0, 25	\$0, 25
8 and 10 wheel engines, 18 and 19 inch cylinders		2. 65	. 25	. 265
8 and 10 wheel engines, over 19-inch cylinders		2. 80	. 265	. 28
Through freight:	2.00	2.00	. 200	. 40
8-wheel engines	2, 65	2, 95	. 265	. 295
Mogul and 10-wheel engines, 19-inch cylinders or less	2. 80	3, 10	. 28	. 31
Consolidation and 10-wheel engines, 20 by 24 inch cylinders.	2. 90	3, 20	. 29	. 32
Consolidation and 10-wheel engines, 20 by 24 inch cylinders.		3, 35	. 305	. 335
Consolidation engines, 22 by 30 inch cylinders	3, 25	3, 55	. 325	, 355
12-wheel engines, 21 by 32 inch-cylinders	3, 30	3, 60	. 325	. 36
	3, 30	3. 00	. 33	. 30
Local freight:	2, 85	9.15	00=	215
8-wheel engines	3, 00	3.15	. 285	. 315
Moguls and 10-wheel engines, 19-inch cylinders or less		3. 30	. 30	. 33
Consolidation and 10-wheel engines, 20 by 24 inch cylinders.	3. 10	3.40	. 31	. 34
Consolidation and 10-wheel engines, 19½ by 28 inch cylinders.	3. 25	3. 55		. 355
Consolidation engines, 22 by 30 inch cylinders	3. 45	3. 75	. 345	. 375
12-wheel engines, 21 by 32 inch cylinders	3.50	3. 80	. 35	. 38
Work and helper	1 2. 40	1 2. 70	. 25	. 27
Switch:				
First-class yards	1 2. 25	1 2. 50	. 25	. 25
Second-class yards	1 2.15	1 2. 40	. 25	. 25
Hostlers:				
Night service	2 80. 00	2 87. 60		. 25
Day service	2 75, 00	2 82, 60		. 25

## EXCEPTED LINES, 1913.

The following rates were fixed in 1913 to apply on the lines specified for all engines: Arkansas Midland Railroad: Brinkley, Helena & Indian Bay Railroad; Little Rock & Monroe Railway; Farmerville & Southern Railroad: Mississippi River, Hamburg & Western Railway.

		Overtime per hour.
Passenger	\$2. 40 2. 95 3. 15 2. 70 2. 40	\$0. 24 . 295 . 315 . 27 . 24

<sup>&</sup>lt;sup>1</sup> Per day of 10 hours or less; overtime after 10 hours' service.
<sup>2</sup> Per month; 12 hours or less constitute a day's work.

#### OREGON-WASHINGTON RAILROAD & NAVIGATION CO.

A comparison of rates of pay to firemen on the Oregon-Washington Railroad & Navigation Co. before and after the award of the arbitration board is made according to operating districts, branches of train service, and classes of engines. In all classes of service the increase in rates of pay as the result of the application of the award of the board, except local freight service, were representative. The percentage of increase in rates to firemen on local freight trains was somewhat above the general showing for other railroads. The detailed comparison is as follows:

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

				1	Umati	lla and	Hunti	ngton				
		Passe	enger.		Т.	hrough	freigh	t.	,	Local f	reight.	
Class of engine.	Rate		Incr	ease.		e per	Incr	ease.		e per	Incre	ase.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.
8-wheel: Coal. Oil. 8-wheel, 16 and 17 by 24:	}				\$2.65	\$2.95 2.80	\$0.30 .15	11. 3 5. 7	}\$2.65	\$3.20 3.05	\$0.55 .40	20.8 15.1
CoalOil.	}\$2.40	\$2.55	\$0. 15	6.3				••••				•••••
8-wheel, 18 by 26: Coal.	2.50	2.65	. 15	6.0								
Mogul: Coal Oil.	}12.70	1 2. 85	. 15	5. 6	12.80	${13.10}$	. 30	10.7 5.4	}12.80	13.35 3.20	. 55	19.6 14.3
10-wheel, 18 by 24: CoalOil	2.70	2.85	. 15	5. 6	2.80	$\begin{cases} 3.10 \\ 2.95 \end{cases}$	. 30	10.7 5.4	2.80	{ 3.35 3.20	. 55	19.6 14.3
10-wheel, 19 by 24: Coal. Oil.	2.70	2.85	. 15	5. 6	2.80	{ 3.10 2.95	.30	10.7 5.4		{ 3.35 3.20		19.6 14.3
10-wheel, 20 by 24: Coal Oil	2.90	3.05	. 15	5. 2	3.00			10.0				18.3 13.3
10-wheel, 20 by 26: Coal. Oil.	2.90	3.05	. 15	5. 2	3.00	{ 3.30 3.15		10.0		{ 3.55 3.40		18.3 13.3
10-wheel compound: Coal Oil Pacific, simple and com-	2.90	3. 05	. 15	5.2		{ 3.30 3.15		10. 0 5. 0		{ 3.55 { 3.40		18.3 13.3
pound: CoalOil.	2.90	3. 05	. 15	5. 2	3.00	{ 3.30 3.15	. 30 . 15	10. 0 5. 0	3.00	$\begin{cases} 3.55 \\ 3.40 \end{cases}$	. 55	18.3 13.3
Consolidation, 20 by 24: CoalOil.	3.05	3. 20	. 15	4.9	3.15	$\begin{cases} 3.45 \\ 3.30 \end{cases}$	.30	9. 5 4. 8	3. 15	{ 3.70 3.55	. 55	17.5 12.7
Consolidation, 19 by 30:  Coal	3.05	3. 20	. 15	4.9		3.45 3.30		9. 5 4. 8		{ 3.70 3.55		17. 5 12. 7
compound: Coal	3.05	3. 20	. 15	4.9	3. 15	$\left\{ \begin{array}{l} 3.45 \\ 3.30 \end{array} \right.$	. 30 . 15	9. 5 4. 8	3. 15	{ 3.70 { 3.55	. 55	17. <b>5</b> 12. <b>7</b>

<sup>1</sup> Average rate for all districts.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

					All	lother	distric	ts.				
		Passe	enger.		Т	hrough	freigh	t.	Local freight.			
Class of engine.	Rate		Incre	asé.		e per	Incre	ease.	Rate	e per	Incre	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	11611	Amount.	Per cent.
8-wheel: Coal. Oil. 8-wheel, 16 and 17 by 24:	}				\$2.65	\$2.95 2.80	\$0.30 .15	11.3 5.7	}\$2. 65	\$3. 20 3. 05	\$0.55 .40	20. 8 15. 1
8-wheel, 16 and 17 by 24; Coal. Oil. 8-wheel, 18 by 26; Coal.	}\$2.40	\$2.55	<b>\$</b> 0. 15	6.3				· · · · · ·				
Oil	2.50	2.65	. 15	6.0								
Mogul: Coal Oil	2.65	2.80	. 15	5.7	2.75	$\left\{ \begin{array}{l} 3.05 \\ 2.90 \end{array} \right.$	. 30 . 15	10. 9 5. 5	2.75	$\left\{ \begin{array}{l} 3.30 \\ 3.15 \end{array} \right.$	. 55 . 40	20.0 14.5
10-wheel, 18 by 24: Coal. Oil. 10-wheel, 19 by 24:	2. 65	2.80	. 15	5. 7	2.75	$\begin{cases} 3.05 \\ 2.90 \end{cases}$	. 30	10. 9 5. 5	2.75	{ 3.30 3.15	. 55	20.0 14.5
Coal	2.65	2.80	. 15	5.7	2.75	{ 3.05 2.90	. 30	10.9 5.5	2.75	{ 3.30 3.15	. 55	20. 0 14. 5
10-wheel, 20 by 24: Coal	2.80	2.95	. 15	5. 4	2. 90	{ 3. 20 3. 05	. 30		,	{ 3.45 3.30		19. 0 13. 8
10-wheel, 20 by 26: Coal Oil.	2.80	2.95	. 15	5. 4		{ 3.20 3.05				{ 3. 45 3. 30		19.0 13.8
10-wheel compound: Coal. Oil. Pacific, simple and com-	2.80	2.95	. 15	5.4		{ 3. 20 3. 05			_	$\begin{cases} 3.45 \\ 3.30 \end{cases}$		19. 0 13. 8
pound: Coal Oil	2.80	2.95	. 15	5.4	2.90	{ 3. 20 3. 05	. 30	10. 3 5. 2	2. 90	$\begin{cases} 3.45 \\ 3.30 \end{cases}$	. 55 . 40	19. 0 13. 8
Consolidation, 20 by 24: Coal Oil	2.95	3. 10	. 15	5. 1	3. 05	$\left\{ \begin{array}{l} 3.35 \\ 3.20 \end{array} \right.$	. 30	9.8 4.9	3.05	$\begin{cases} 3.60 \\ 3.45 \end{cases}$	. 55	18. 0 13. 1
Consolidation, 19 by 30: Coal. Oil.	2.95	3. 10	. 15	5. 1	3. 05	$\left\{ \begin{array}{l} 3.35 \\ 3.20 \end{array} \right.$	.30	9.8 4.9	3.05	$\begin{cases} 3.60 \\ 3.45 \end{cases}$	. 55 . 40	18. 0 13. 1
Consolidation, simple and compound: Coal	} 2.95	3. 10	. 15	5.1	3.05	{ 3. 45 3. 30	. 40	13. 1 8. 2	3.05	{ 3.70 3.55	. 65 . 50	21.3 16.4

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

					Wor	k train.			S	witching		
. Class of e	engine.			ate pe	r	Incr	ease.		ate per day.	In	crease	
			1907	1	911	Amount.	Per cent	. 190	7 1911	Amoun	t. Per	r cent.
8-wheel: Coal			}\$2.40		. 70	<b>\$0.30</b>	12. 8 6. 8					
Mogul: 1 Coal Oil			2.55	1 2	. 85	.30	11.8 5.9					
CoalOil	130 class	g: 1 	2.52	[ 2	. 825 . 675	.30	11.9 5.9					
10-wheel, 136, 170 class: 1 Coal			2.70		.00	.30	11. 1					
Oil Consolidated: <sup>1</sup> Coal				1	. 85	. 15	5. 6 10. 5					
All engines: Average for fir		•••••	2.85		.00	. 15	5.3	3				•••••
class yards, Grange City, Outside yard I than switchi	Star and R imits fo	ouck, iparia or other						\$2.2		\$0.24		11. 4 9. 4
Enan Switch	11g 501 v	100			,			2.0	2.30	.24	1	0.1
		Snowp	low.			Hel	per.		Averag	ge rate for trips.		fied
Class of engine.	Rate r	er day.	Incre	ase.	Rate	per mont	h. Incre	ase.	Rate pe	r month.	Incr	ease.
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	1161	Amount.	Per cent.
Rotary snow-												
Coal	}\$3. 15	\$3.45 3.30	\$0.30 .15	9.5 4.8				, .				
Locomotive snowplow service— Coal Oil Kamela and Pleasant	} 2.65	$\left\{ egin{array}{l} 2.95 \\ 2.80 \end{array} \right.$	.30	11.3 5.7								
Valley— Coal Oil					}\$85.	00 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		10.6 5.3				
Telocoset— Coal Oil		,			} 2 2.	$90 \left\{ \begin{array}{l} 2 \ 3. \ 20 \\ 2 \ 3. \ 05 \end{array} \right.$	.30	10.3 5.2				
All engines: Coal						,			\$78.19	\$87.06 82.73	\$8.87 4.54	11.3 5.8

<sup>&</sup>lt;sup>1</sup>Average rate for all districts.

<sup>&</sup>lt;sup>2</sup> Per day.

# Rates of pay per day of locomotive firemen.1

			Uma	tilla and	Huntin	gton.			
-		Thro	ugh.		Local.				
Class of engine.	Cos	al.	Oil.		Coal.		Oil.		
•	1907	1911	1907	1911	1907	1911	1907	1911	
FREIGHT SERVICE. <sup>2</sup> 8-wheel  Mogul <sup>3</sup> Do.  10-wheel:  18 by 24 inch cylinders  19 by 24 inch cylinders  20 by 24 inch cylinders  20 by 26 inch cylinders  Compound.  Pacific, simple and compound.  Consolidation:  20 by 24 inch cylinders  19 by 30 inch cylinders  Simple and compound  Simple and compound  Simple and compound  Simple and compound	\$2.65 2.75 2.85 2.80 2.80 3.00 3.00 3.00 3.15 3.15 3.15	\$2.95 3.05 3.15 3.10 3.30 3.30 3.30 3.30 3.45 3.45 3.55	\$2.65 2.75 2.85 2.80 2.80 3.00 3.00 3.00 3.15 3.15 3.15	\$2.80 2.90 3.00 2.95 2.95 3.15 3.15 3.15 3.30 3.30 3.30 3.40	\$2.65 2.75 2.85 2.80 2.80 3.00 3.00 3.00 3.15 3.15 3.15	\$3. 20 3. 30 3. 40 3. 35 3. 35 3. 55 3. 55 3. 55 3. 70 3. 70 3. 80	\$2.65 2.75 2.85 2.80 2.80 3.00 3.00 3.00 3.00 3.15 3.15 3.15	\$3. 05 3. 15 3. 25 3. 20 3. 20 3. 40 3. 40 3. 40 3. 55 3. 55 3. 55 3. 65	

	All other districts.										
		Thro	ough,		Local.						
Class of engine.	Со	al.	0	Oil.		Coal.		il.			
	1907	1911	1907	1911	1907	1911	1907	1911			
FREIGHT SERVICE.2											
8-wheel. Mogul <sup>3</sup> . 10-wheel:		\$2.95 3.05	\$2.65 2.75	\$2.80 2.90	\$2.65 2.75	\$3.20 3.30	\$2.65 2.75	\$3.05 3.15			
18 by 24 inch cylinders 19 by 24 inch cylinders	2.75	3. 05 3. 05 3. 20	2.75 2.75 2.90	2.90 2.90 3.05	2.75 2.75 2.90	3.30 3.30 3.45	2.75 2.75 2.90	3. 15 3. 15			
20 by 24 inch cylinders	2.90 2.90	3. 20 3. 20	2.90 2.90	3. 05 3. 05	2.90 2.90	3. 45 .3. 45	2.90 2.90	3. 30 3. 30 3. 30			
Pacific, simple and compound Consolidation: 20 by 24 inch cylinders		3. 20 3. 35	2,90	3.05	2.90	3. 45 3. 60	2.90	3.30			
19 by 30 inch cylinders Simple and compound	3.05 3.05	3.35 3.45	3. 05 3. 05	3.20 3.30	3. 05 3. 05	3.60 3.70	3. 05 3. 05	3. 45 3. 55			
Simple		3.45		3.30 3.30 4.00		3.70 3.70 4.00		3. 55 3. 55 4. 00			

<sup>Rates given for 1911 are applicable to the "First district."
Per day of 100 miles or less, 10 hours or less; overtime pro rata.
Lower rate applies on single trip between La Grande and Pendleton.</sup> 

# Rates of pay per day of locomotive firemen—Continued.

Class of engine.			natilla aı ntingto		All o	
Class of engine.		190	7   19	11	1907	1911
PASSENGER SERVICE. <sup>1</sup> 8-wheel: 16 and 17 by 24 inch cylinders		\$2.	40 \$2	. 55	\$2.40	\$2.55
18 by 26 inch cylinders		2. 2.	50 2 65 2 75 2	. 65 . 80 . 90	2.50	2.65
10-wheel:  18 by 24 inch cylinders. 19 by 24 inch cylinders. 20 by 24 inch cylinders. 20 by 26 inch cylinders. Compound. Pacific, simple and compound. Consolidation:		2. 2. 2. 2.	70 2 90 3 90 3 90 3 90 3 90 3	. 85 . 85 . 05 . 05 . 05 . 05	2.65 2.65 2.80 2.80 2.80 2.80 2.80	2.80 2.80 2.95 2.95 2.95 2.95
20 by 24 inch cylinders 19 by 30 inch cylinders Simple and compound Simple. Mikado Mallet		3. 3. 3.	05 3 05 3 05 3 3 4	20	2.95 2.95 2.95	3. 10 3. 10 3. 10 3. 10 3. 10 4. 00
,			Coal.		O	il.
Class of engine.		190	7 19	11	1907	1911
WORK-TRAIN SERVICE. <sup>3</sup> 8-wheel. Mogul <sup>4</sup> Do. 10-wheel, 112 and 130 class <sup>4</sup> Do. 10-wheel, 136, 170, 179, and 190 class <sup>4</sup> Do. Consolidated <sup>4</sup> Do.		2.	50 2 60 2 50 2 55 2 65 2 75 3 80 3	. 70 . 80 . 90 . 80 . 85 . 95 . 05 . 10 . 20	\$2. 40 2. 50 2. 60 2. 55 2. 55 2. 65 2. 75 2. 80 2. 90	\$2. 55 2. 65 2. 75 2. 65 2. 70 2. 80 2. 90 2. 95 3. 05
					1907	1911
First-class yards		rvice			\$2. 25 2. 15 2. 65 2. 65	\$2.50 2.40 2.90 2.90
Class of service.	Rate per—	1907	1911		Overtin	me.
SNOWPLOW.  Rotary snowplow: Coal. Oil. When detailed for locomotive snowplow service per day of 24 hours, all classes of engines: Coal. Oil.		\$3. 15 3. 15 2. 65 2. 65	\$3. 45 3. 30 2. 95 2. 80		ter 10 ho Do.	urs.
HELPER.  Kamela & Pleasant Valley: Coal. Oil Telocoset single-crewed: 8		85. 00 85. 00	94. 00 89. 50		o rata. Do.	
Coal. Oil Mallet engines.	Day 9	2. 90 2. 90	3. 20 3. 05 4. 00		Do. Do. Do.	

<sup>&</sup>lt;sup>1</sup> Basis of day's work, 1910, 10 hours or less, 100 miles or less; 1907, 100 miles or less. Overtime pro 1 Basis of day's work, 1250, 127 rata.

2 Lower rate applies on single trip between La Grande and Pendleton.

3 Per day of 100 miles or less, 10 hours or less; overtime prorata.

4 Higher rate to apply between Huntington and Umatilla, and the lower rate over all other districts.

5 Per day of 10 hours or less; overtime prorata, after 10 hours.

10 hours or less constitute a day.

7 Daily prorata, 100 miles or less, 10 hours or less, constitute a day.

8 When double-crewed, same rate as Kamela and Pleasant Valley double crews.

9 10 hours or less, 100 miles or less, constitute a day.

# Rates of pay per day of locomotive firemen—Continued.

Runs between !—	Rate per—	Co	al.	0	il.
Runs between —	Kate per—	1907	1911	1907	1911
Albina and Maegley Junction Heppner Junction and Heppner Arhugton and Condon. Pendleton and Pilot Rock La Grande and Elgin. Starbuck and Pomeroy. Colfax and Moscow. Sierra Nevada Branch. Wallace and Burke.	dododododododododododododododododododododododo	70.50 70.50 75.75 77.50 87.50	\$82.50 81.75 95.75 78.75 78.75 86.50 86.50 96.50	\$73.50 73.50 87.50 70.50 70.50 75.75 77.50 87.50 87.50	\$78. 00 77. 65 91. 65 74. 65 74. 65 82. 00 82. 00 92. 00 92. 00

<sup>1</sup> Overtime after 10 hours.

## OREGON SHORT LINE RAILROAD CO.

On the Oregon Short Line Railroad, as in the case of the Oregon-Washington Railroad & Navigation Co., the percentage of increase in rates paid to firemen in local freight train service are noteworthy. In other classes of services the changes in rates as the result of the award of the arbitration board are typical. A detailed comparison of rates of pay to firemen before and after the award, together with the amount and per cent of increase in rates as the result of the arbitration by branches of service and classes of locomotives is shown below.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Freight (except local).					Local freight.				
Class of engine.		Rate per day. Increase.				e per	Increase.			
	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.		
8-wheel, simple, cylinders, 18 by 26 and 18\frac{3}{5} by 26  10-wheel, simple, cylinders, 18 by 24.	<b>\$2.</b> 65	\$2.95	\$0,30	11.3	<b>\$2.65</b>	\$3. 20	<b>\$0.</b> 55	20.8		
Switch, cylinders, 18 by 26 and 19 by 26.	2. 50	2. 80	.30	12.0	2. 50	3.05	. 55	22.0		
Switch, cylinders, 19 by 26, 20 by 26, and 21 by 26	2.75	3.05	.30	10.9	2,75	3.30	. 55	20.0		
10-wheel, simple, cylinders, 19½ by 24 and 19½ by 26.	2. 75	3.05	.30	10.9	2.75	3.30	. 55	20.0		
10-wheel, simple, cylinders, 19½ by 24 and 20 by 26	2.80	3.10	.30	10.7	2, 80	3.35	. 55	19.6		
and 20 by 28 Mogul compound cylinders, 15½ and	2.95	3, 25	.30	10. 2	2, 95	3.50	. 55	18, 6		
26 by 28. 10-wheel simple, cylinders, 20 by 28. Atlantic, simple, cylinders, 20 by 28. Pacific, simple, cylinders, 22 by 28. 12-wheel, simple, cylinders, 21 by 30.	2. 85 2. 75 3. 05	3. 15 3. 05 3. 35	.30 .30 .30	10.5 10.9 9.8	2. 85 2. 75 3. 05	3. 40 3. 30 3. 60	. 55 . 55 . 55	19.3 20.0 18.0		
Consolidated: Simple, cylinders, 21 by 28. Compound, cylinders, 16 and 27 by 30.	3.15	3. 45	.30	9.5	3.15	3.70	. 55	17.5		
Simple, cylinders, 21 by 32 and 22 by 30	3. 25	3. 55	.30	9. 2	3. 25	3. 80	. 55	16.9		

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

		P	assenger.		Work and helper.				
Class of engine.		per	Incr		e per	Increase.			
	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.	
8-wheel, simple, cylinders, 18 by 26 and 18\(^5_8\) by 26.  10-wheel, simple, cylinders, 18 by 24  Switch, cylinders, 18 by 26 and 19 by	. \$2.50	\$2,65	\$0.15	6.0	\$2.40	\$2.70	\$0.30	12, 5	
26. Switch, cylinders, 19 by 26, 20 by 26,					2. 50	2. 80	.30	12.0	
and 21 by 26					2.65	2.95	.30	11.3	
10-wheel, simple, cylinders, 19½ by 24 and 19½ by 26	. 2.65	2. 80	.15	5. 7	2.50	2. 80	.30	12.0	
10-wheel, simple, cylinders, 19½ by 24 and 20 by 26	2.70	2.85	.15	5. 6	2, 55	2, 85	.30	11.8	
and 20 by $28$ .  Mogul compound, cylinders, $15\frac{1}{2}$ and $26$ by $28$ .	- 00	3.00	.15	5.3	2.70	3.00	.30	11,1	
10-wheel, simple, cylinders, 20 by 28	2.75	2.90	.15	5. 5	2.60	2.90	.30	11.5	
Atlantic, simple, cylinders, 20 by 28 Pacific, simple, cylinders, 22 by 28	2. 85	2.80 3.00	.15 .15	5.7 5.3	2. 50 2. 80	2. 80 3. 10	.30	12.0 10.7	
12-wheel, simple, cylinders, 21 by 30 Consolidated: Simple, cylinders, 21 by 28 Compound, cylinders, 16 and 27 by 30	3,05	3. 20	.15	4.9	2.90	3.20	.30	10.4	
Simple, cylinders, 21 by 32 and 22 by 30.	3.05	3.20	.15	4.9	2.90	3. 20	.30	10.4	
	Switchir	1		Snow plow			Hostle		

	Switching.1				Snow plow.				Hostlers.			
Class of engine.		e per			Rate per day.		Increase.		Rate per day.		Increase.	
	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.	1909	1911	Amount.	Per cent.
All engines. Snow plow: Rotary.	\$2. 53	\$2. 53	\$0.00	00.0		\$3. 25		00.0				
Wedge Hostlers.					2.75	3.05	. 30	10.9	\$2.90	<b>\$</b> 3.15	\$0.25	8,6

<sup>&</sup>lt;sup>1</sup> Average for all yards.

Note.—On oil-burning engines in any service but passenger and switching the rate fixed in 1910 is 15 cents lower per 100 miles than the rate shown above.

## Rates of pay of locomotive firemen.1

Class of engine.	Freight (except local).		Local freight.		Passe	nger.	Work or helper.	
	1909	1911	1909	1911	1909	1911	1909	1911
8-wheel, simple, cylinders, 18 by 26, 18\frac{8}{8} by 26. 10-wheel, simple, cylinders, 18 by 24. Switch: Cylinders, 18 by 26, 19 by 26. Cylinders, 19 by 26, 20 by 26, 21 by 26.  10-wheel, simple: Cylinders, 19\frac{1}{2} by 24, 19\frac{1}{2} by 26. Cylinders, 19\frac{1}{2} by 24, 20 by 26. Cylinders, 20 by 26, 20 by 28.  Mogul compound, cylinders, 15\frac{1}{2} compound, cylinders, 15\frac{1}{2} compound, cylinders, 20 by 28.  10-wheel, simple, cylinders, 20 by 28. Atlantic, simple, cylinders, 20 by 28. 10-wheel, simple, cylinders, 22 by 28. Pacific, simple, cylinders, 22 by 28. 12-wheel, simple, cylinders, 21 by 30. Consolidation:	\$2, 65 2, 65 2, 50 2, 75 2, 75 2, 80 2, 95 2, 85 2, 75 3, 05 3, 15	\$2, 95 2, 95 2, 80 3, 05 3, 10 3, 25 3, 15 3, 05 3, 35 3, 35 3, 35 3, 45	\$2.65 2.65 2.50 2.75 2.75 2.80 2.95 2.95 2.85 2.75 3.05 3.15	\$3. 20 3. 20 3. 05 3. 30 3. 35 3. 50 3. 50 3. 40 3. 30 3. 60 3. 60 3. 70	\$2, 50 2, 50 2, 65 2, 70 2, 85 2, 75 2, 65 2, 85 3, 05	\$2.65 2.65 2.80 2.85 3.00 3.00 2.90 2.80 3.00 3.00 3.20	\$2. 40 2. 40 2. 50 2. 65 2. 55 2. 70 2. 70 2. 60 2. 50 2. 80 2. 90	\$2.70 2.70 2.80 2.95 2.85 3.00 2.95 2.80 3.10 3.10 3.20
Simple, cylinders, 21 by 28 Compound, cylinders, 16 and 27 by 30	3. 15 3. 15	3. 45 3. 45	3. 15 3. 15	3.70 3.70	3. 05 3. 05	3. 20 3. 20	2. 90 2. 90	3. <b>2</b> 0 3. 20
Simple, cylinders, 21 by 32, 22 by 30.  Hostlers <sup>2</sup>	3, 25 2, 90	3. 55 3. 15	3. 25	3, 80	3.05	3. 20	2.90	3. 20

Class of service.	1909	1911
Switching (overtime at one-tenth rate): 3 Salt Lake, Pocatello, Glenns Ferry, and Montpelier yards. Other yards 3 Exception: Kemmerer and Cumberland yards on engines above the 551 class 3. Snow plow: Rotary plow 4 Wedge plow 5	2.50	\$2.50 2.50 2.60 3.25 3.05

Rate per 100 miles, except as otherwise noted.

Note.—On oil-burning engines in any service but passenger and switching the rates fixed in 1910 are 15 cents lower per 100 miles than the rates shown above.

#### PEORIA & PEKIN UNION RAILWAY CO.

The Peoria & Pekin Union Railway employed firemen in yard or construction service. As the result of the award of the arbitration board they received advances in rates of pay of more than 11 per cent. As 10 hours constituted a day's work, the increase in terms of cents was 25 cents a day.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

ard firemen in Pekin 1	Rate pe	er hour.	Increase.		
Class of service.	1907	1911	Amount.	Per cent.	
Yard firemen in Peoria <sup>1</sup> . Yard firemen in Pekin <sup>1</sup> . Firemen on construction <sup>1</sup> .	\$0. 225 . 215 . 215	\$0.25 .24 .24	\$0.025 .025 .025	11. 1 11. 6 11. 6	

<sup>1 10</sup> hours constitute a day's work.

<sup>1</sup> Rate per 100 innes, except as otherwise noted.
2 Per day of 12 hours.
3 Basis of a day's work, 12 hours or less.
4 Basis of a day's work, 12 hours, overtime after 12 hours, pro rata.
5 Basis of a day's work 100 miles, overtime after 10 hours.

## Rates of pay of locomotive firemen.

Class of service.	Rate pe	er hour.
Crass of Service.	1907	1911
Yard firemen in Peoria <sup>1</sup> . Yard firemen in Pekin <sup>1</sup> . Firemen on construction <sup>1</sup> . Firemen on passenger <sup>1</sup> .	\$0. 225 . 215 . 215	\$0. 25 . 24 . 24 . 24

1 10 hours constitute a day's work.

# QUINCY, OMAHA & KANSAS CITY RAILROAD CO.

As the result of the application of the award of the arbitration board on the Quincy, Omaha & Kansas City Railroad, the daily rates of pay to locomotive firemen employed in passenger service, as can be readily seen from the following table, were advanced 6.7 per cent; in through-freight service, 11.6 per cent; in way-freight service, 10.8 per cent; and in switching service, 12 per cent. The rates of pay to hostlers for a day of 12 hours were increased from \$2.30 to \$2.55, or 10.9 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

Class of service.	Rate per	100 miles.	Increase.		
Class of service.	1909	1910	Amount.	Per cent.	
Passenger Freight Way freight Switching Hostler	2.78	\$2.40 2.88 3.08 12.34 22.55	\$0. 15 . 30 . 30 . 25 . 25	6.7 11.6 10.8 12.0 10.9	

<sup>1</sup> Per day of 10 hours.

## Rates of pay of locomotive firemen.

	Rate per	100 miles.
Class of service.	1909	1910
Passenger Mixed trains Freight Way freight Switching	2. 58 2. 78	\$2. 40 2. 55 2. 88 3. 08 1 2. 34
Hostlers	2 2. 30	<sup>2</sup> 2. 55

<sup>1</sup> Per day of 10 hours.

## ST. LOUIS & SAN FRANCISCO RAILROAD CO.

The following table, which sets forth in detail by branches of service and classes of engines the amount and per cent of increase in rates of pay granted to locomotive firemen as the result of the award of the arbitration board, requires no comment or explanation, and there are

<sup>&</sup>lt;sup>2</sup> Per day of 12 hours.

<sup>&</sup>lt;sup>2</sup> Per day of 12 hours.

no unusual features to which attention needs to be directed. The comparison in detail is as follows:

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective May 16, 1910.

	Rate	er day.	Increase.		
Class of service.	1907	1910	Amount.	Fer cent.	
Passenger: Under 18-inch cylinders—					
Coal	\$2, 25	\$2.40	\$0.15	6.7	
Coal. Oil	2. 50	2.65	. 15	6.0	
Freight: 8-wheel, all engines— Coal		£ 2.95	.30	11.3	
Oil 10-wheel, 18 and 19 inch cylinders— Coul	2.00	2, 80	. 15	5. 7	
Oil. 10-wheel (simple) 20-inch and over, except 742 to 799 class—	1 2.80	{ 3. 10 2. 95	.30	10. 7 5. 4	
Coal Oil. 10-wheel (simple) 775 to 799 class—	2. 90	$   \left\{     \begin{array}{c}       3.20 \\       3.05   \end{array} \right. $	.30	10. 3 5. 2	
Coal. Oil. 10-wheel (compound) 742 to 774 class—	2. 95	$   \left\{ \begin{array}{c}     3.25 \\     3.10   \end{array}   \right. $	.30	10. 2 5. 1	
Coal. Oil. Consolidation, 20 by 24 inch cylinders—	3.05	$\left\{ \begin{array}{c} 3.35 \\ 3.20 \end{array} \right.$	.30 .15	9.8 4.9	
Coal	2 2, 90	{ 3.20 3.05	.30	10.3 5.2	
Consolidation 20 by 28 inches and 21 by 28 inch cylinders— Coal. Oil.	} 2 3. 00	{ 3.30 3.15	.30	10.0	
Oil. Consolidation, 22 by 28 inch cylinders— Coal. Oil.	} 3.10	{ 3. 40 3. 25	.30	9.7	
Mine run, all engines <sup>3</sup> .  Pusher or hill; all engines except Mallet:				• • • • • • • • • • • • • • • • • • • •	
Coal. Oil. Work train:	4 2. 50	2.80 2.65	.30	12. 0 6. 0	
All engines except consolidation, 21 or 22 by 28 inch cylinders— Coal.	) 0.40	£ 2.70	. 30	12.5	
Oil. Consolidation, 21 or 22 by 28 inch cylinders— Coal.	} 2.40	{ 2.55 2.80	.15	6.3	
Consolidation, 23 by 28 inch cylinders—	} 2.50	2.65	. 15	6.0	
Oil. Switch or yard—all engines:	} 2.70	3.00 2.85	.30	11. 1 5. 6	
First-class yards— Coal. Oil	2. 25	2, 50	. 25	11.1	
Second-class yards— Coal.	2.15	2. 40	. 25	11.6	
Oil. Engine dispatchers used or called from fireman ranks: Day Night	2, 25	2.50	. 25	11.1	
Branch runs: Scullin (mixed)	2. 40	2. 65	. 25	21.6	
Bonnerville (mixed)	2.65	2. 95	.30	11.3	

¹ Local freight in 1907, \$3.10.
² Local freight in 1907, \$3.25.
³ Through freight rates, according to class of engine. Extra or through freight trains paid 33 cents per hour 1907, 36 cents per hour 1910, for doing mine work.
⁴ Rate for all engines, 1907.

Note.—Local freight rates in 1910 fixed at 25 cents per 100 miles or less over through freight rates quoted above.

# Rates of pay of locomotive firemen.

		Rate	per d	ay.	Overt	ime per	hour.	
Class of engine.	Class of service.	1907	19	10	1907	19	io	Basis of day's work.
		1907	Coal.	Oil.	1907	Coal.	Oil.	
Under 18-inch cylinders 18-inch cylinders and over. 8-wheel, all engines	do	2.50	2.65	\$2.40 2.65 2.80	\$0. 225 . 25 . 265	\$0. 24 . 265 . 295	\$0. 24 . 265 . 28	100 miles or less. Do. Do.
10-wheel: 18 and 19 inches Simple, 20-inch and over, except 742 to 799 class.		<sup>2</sup> 2. 80 2. 90	3. 10 3. 20	2. 95 3. 05	. 28 . 29	.31	. 295 . 305	Do. Do.
Simple, 775 to 799	do	2.95	3. 25	3.10	. 295	. 325	. 310	Do.
class. Compound, 742 to 774 class.	do	2 3. 05	3, 35	3. 20	. 305	. 335	. 32	Do.
Consolidation: 20 by 24 inches 20 by 28 and 21 by 28 inches.	dodo	2. 90 3 3. 00	3. 20 3. 30	3. 05 3. 15	. 290 . 300		. 305 . 315	
22 by 28 inches 23 by 28 inches 24 inches and over, and 190,000 pounds	do		3.60 3.75	3. 45 3. 75	• • • • • • • • • • • • • • • • • •	. 34 . 36 . 375	. 325 . 345 . 375	Do.
or more on drivers.  Mallet type. All engines.	do	(4)	4.00 (4)	4.00 ( <sup>1</sup> )		.40	.40	Do. Do.
All engines. All engines except Mallet. Mallet type. All engines except consolidation 21 or 22 by 28	Pusher or hilldo	<sup>5</sup> 2. 50 2. 40	2. 80 4. 00 2. 70	2. 65 4. 00 2. 55	. 25	. 28 . 40 . 27	. 265 . 40 . 255	Do.
inches. Consolidation: 21 or 22 by 28 inches 23 by 28 inches	dodododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododo	2. 50 2. 70	2. 80 3. 00	2.65 2.85	. 25	. 28	. 265 . 285	Do. Do.
and 190,000 pounds	dodoBreaking in Switch or yard	2. 35 2. 25	3. 75 4. 00 2. 65 2. 50	2 75	. 235	. 25	. 375 . 40 . 265 . 25 . 24	Do.
	1	1		1	1		Poto	

Springfield	Class of service.	Rate per—	1907	1910
	Kansas Čity Springfield— Round trip. Single trip. Memphis and Birmingham, round trip Engine dispatchers used or called from firemen's ranks: 7 Day. Night. Transferring engines at Springfield 3 Moving engines to and from shops when held at any point on district terminal to receive or deliver an engine Branch runs:	Day Day	. 35 . 20 . 30 2. 25 2. 40 . 25 2. 50 2. 55	\$0. 45 . 40 . 25 . 35 2. 50 2. 65 . 35 2. 75 3. 10 . 2. 95

<sup>1</sup> Local freight rates in 1910 fixed at 25 cents per 100 miles or less over through freight rates quoted above.

2 Local freight, 1907, \$3.10.

3 Local freight, 1907, \$3.25.

4 Through freight rates according to class of engine. Extra or through freight trains paid 33 cents per hour, 1907; 36 cents per hour, 1910, for doing mine work.

6 Rate for all engines, 1907.

6 Terminal overtime paid for this service in excess of 1 hour.

7 12 hours or less constitute a day's work.

8 Not less than 1 hour paid for any trip.

#### SOUTHERN PACIFIC CO .- ATLANTIC SYSTEM.

The table next submitted shows in an exhaustive way the result of the application of the award of the arbitration board on the Atlantic system of the Southern Pacific Co. A comparison of rates paid to locomotive firemen before and after the award is set forth according to the principal branches of train service and according to classifications of locomotives. The comparison, which requires no detailed comment or explanation, follows.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Су	linder	under 18	inches.	Engines with cylinders 18 inches and over.						
<b>6</b> 3 - 6 1	70-4				Class A.						
Class of service.	da	per y.	Incr	ease.	Rate da		Iner	ease.			
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.			
	2. 25 2. 25	2.40 1 72.00 3.31 1 72.00	.45 .15 4.50 .21 4.50	20. 0 6. 7 6. 7 6. 8 6. 7	2.65 2.50	2.84 2.65 1 79.50 3.65 1 79.50	4.50 ,21 4.50				

		1	Engines wi	th cylinde	rs 18 iı	iches a	and over.					
			Class B.		Class C.							
Class of service.	Rate		Incr	ease.	Rate	per y.	Incr	ease.				
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.				
Passenger: Average rate per specified run. Del Rio-Sanderson district. Other main-line districts. Branch passenger: Eagle Pass Branch Wharton-Palacios Branch. Eunice-New Iberia Branch	3.61	2.98	. 20 . 15 4. 50 . 21	7. 2 5. 7 5. 7 5. 8		3.11 2.90 187.00 3.99	4.50 .21	6. 5 5. 5 5. 5 5. 6				
Alexandria Branch		1 83.25			1 82.50							

					Oil-bu	irning	locomo	tives.				
		Clas	s A.			Clas	s B.		Class C.			
Class of service.	Rate	per ý.	Increase. Rate per day. Increase. Rate per day.						ase.			
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Freight service; average rate per specified run	\$3.28	\$3.47	\$0.19	5.8	\$3.45	\$3.64	\$0.19	5.5	\$3.61	\$3.80	\$0.19	5.3
Helper service: Fort Hancock helper Liberty helper Mixed and freight:	2.70 2.50							5.4 9.5	2.97 2.75			5. <b>1</b> 9. 5
Average rate per speci- fied branch run		<sup>1</sup> 76. 18 3. 13	4. 44 . 18			1 79.77 3.27		5. 9 5. 5		1 33.36 3.42		5. 6 5. 2

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

	Coal-burning locomotives.													
		Clas	ass A. Class B. Class C.											
Class of service.	Rate da		- Incre	ease.		e per	Incre	ease.	Rate da		Incre	ease.		
		1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.		
Freight service; average rate per specified run Helper service:	\$3.28		<b>\$0.3</b> 8			\$3.83			<b>\$</b> 3.61			10.5		
Fort Hancock helper Liberty helper Mixed and freight: Average rate per speci-	2.70 2.50	2.90	. 40	16.0	2.63	3.03	. 40	10.6 15.2	2.75	3.16	. 41	10.1 14.9		
fied branch run Do	1 71.77 2.95	1 80.59 3.30				1 84.19 3.44				1 87.77 3.59		11. 2 10. 5		

<sup>1</sup> Rate per month.

# Rates of pay of locomotive firemen.

	Cylinder 18 inch		Engine	es with c		18 inche	s and ove	er (per
Runs between—	day		Clas	s A.	Clas	ss B.	Class C.	
	1907	1910	1907	1910	1907	1910	1907	1910
PASSENGER.								
El Paso and Valentine Valentine and Sanderson Sanderson and Del Rio Del Rio and San Antonio Eagle Pass and San Antonio Spofford and San Antonio San Antonio and Houston via Vietoria San Antonio and Houston via Vietoria San Antonio and Glidden San Antonio and Port Lavaca Glidden and Houston Victoria and Houston Cuero and Houston Beeville and Houston Beeville and Houston	3.50 3.80 3.80 3.00 4.70 5.45 2.75 3.15 2.25 2.90 4.10	\$4.05 3.88 3.70 4.05 4.03 3.19 5.04 5.81 2.93 3.38 2.40 3.07 3.74 4.37 2.40	\$4.00 3.80 3.70 4.25 4.20 3.35 5.25 6.05 3.05 3.50 2.50 3.90 4.55 2.50	\$4. 24 4. 03 3. 91 4. 48 4. 45 3. 52 5. 57 6. 41 3. 23 3. 74 2. 65 3. 39 4. 13 4. 82 2. 65	\$4. 20 3. 99 3. 89 4. 46 4. 42 3. 52 5. 51 6. 35 3. 20 3. 68 2. 63 3. 36 4. 10 4. 78 2. 63	\$4. 44 4. 22 4. 09 4. 69 5. 83 6. 72 3. 39 3. 91 2. 78 3. 55 4. 33 5. 05 2. 78	\$4. 40 4. 18 4. 07 4. 68 4. 62 3. 69 5. 78 6. 66 3. 36 3. 85 2. 75 3. 52 4. 29 5. 01 2. 75	\$4. 64 4. 41 4. 28 4. 90 4. 87 3. 86 6. 09 7. 02 3. 54 4. 09 2. 90 3. 71 4. 52 5. 28
Houston and Galveston (same date double) Houston and La Fayette Houston and Echo. Echo and La Fayette Beaumont and Jacksonville Jacksonville and Dallas. La Fayette and Algiers-New Orleans Trip rates shown above made to apply to agreed basis per 100 miles in passenger service as follows: Del Rio-Sanderson district.	4. 90 2. 50 2. 40 3. 85	2. 74 5. 23 2. 65 2. 57 4. 13 2. 83 3. 48	2. 85 5. 45 2. 80 2. 65 4. 30 2. 95 3. 60	3. 02 5. 78 2. 94 2. 84 4. 56 3. 13 3. 84	2. 99 5. 72 2. 94 2. 78 4. 52 3. 10 3. 78	3. 16 6. 05 3. 08 2. 97 4. 77 3. 27 4. 02	3. 14 6. 00 3. 08 2. 92 4. 73 3. 25 3. 96	3. 31 6. 32 3. 22 3. 10 4. 99 3. 42 4. 21

# Rates of pay of locomotive firemen—Continued.

	Oil-	buri	ning	locor	notive	s (per	day).	Coa	l-burni	ng loco	motiv	es (per	day).
Runs between—	Clas	ss A	. '	Clas	ss B.	Cla	ss C.	Cla	ass A	Clas	s B.	Cla	ass C.
	1907 1	19	10	1907	1910	1907	1910	1907	1 1910	1907	1910	1907	1 1910
FREIGHT SERVICE.2													
El Paso and Valentine Valentine and Sanderson Sanderson and Del Rio Del Rio and San Antonio. Eagle Pass and San Antonio San Antonio and Spofford. San Antonio and Glidden. Glidden and Houston. Glidden and Houston. Glidden and Galveston San Antonio and Victoria. Houston and Victoria. Houston and Victoria. Houston and Victoria. Houston and Galveston Houston and Galveston. Houston and Galveston. Houston and Echo Houston and Beaumont Jacksonville and Rockland. Rockland and Beaumonts. Echo and La Fayette Lake Charles and La Fayette La Fayette and Algiers La Fayette and Algiers La Fayetteand Morgan Citys	4. 50 4. 25 4. 60 4. 60 3. 60 3. 30 2. 60 3. 30 4. 05 2. 60 2. 60 3. 10 2. 60 3. 05 2. 60 2. 60 3. 05 2. 60 3. 05 2. 60 3. 05 3. 05 3. 06 3. 05 3. 06 3.	\$4. 4. 4. 4. 3. 3. 3. 4. 2. 3. 3. 4. 2. 3. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	73 45 45 45 885 885 885 77 70 88 49 99 77 75 99 77 77 77 77 77 77 77 77 77 77 77 77	4. 73 4. 73 4. 4. 46 4. 83 4. 83 3. 47 7. 73 6. 88 3. 47 4. 25 2. 73 3. 26 7. 73 7. 73 73 74 74 75 75 75 75 75 75 75 75 75 75 75 75 75	\$4.97 4.95 5.08 5.08 4.03 3.67 2.88 3.22 3.66 4.99 2.88 2.88 3.46 3.20 2.88 3.40 2.88 3.40 2.88 3.08 2.88 3.08	\$4.95 4.95 4.68 5.06 3.96 3.85 3.19 3.19 2.86 2.86 3.319 2.86 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3	\$5. 19 5. 18 4. 88 5. 31 4. 21 3. 83 3. 01 3. 01	4.50 4.25 4.60 3.60 3.30 2.60 2.60 2.90 3.30 4.05 2.60 3.20 2.60 3.20 2.60 2.60 3.30 2.60 3.30 2.60 3.30 2.60 3.30 2.60 3.30 3.30 3.30 3.30 3.30 3.30 3.30 3	4. 96 4. 96 5. 10 5. 10 4. 05 3. 68 9. 2. 90 3. 92 3. 25 3. 68 4. 52 2. 90 2. 90 2. 90 2. 90 3. 48 3. 22 2. 90 3. 42 2. 90 3. 40 3. 40 3. 40 3. 40 3. 40 4. 50 4. 50 5. 50 6.	4.73 4.46 4.83 4.83 3.78 3.78 3.47 4.25 2.73 3.26 3.27 3.27 3.27 2.73 2.73 2.73 2.73 2.73	\$5. 21 5. 18 4. 87 5. 33 4. 23 3. 85 4. 72 3. 03 4. 72 3. 03 3. 64 3. 36 3. 30 3. 24 3. 03 3. 30 3. 30 3	\$4.95 4.95 4.686 5.06 3.63 2.86 3.43 4.46 2.86 2.86 2.86 3.41 3.19 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86	5. 41 5. 09 5. 56 5. 56 4. 41 4. 02 3. 16 4. 92 3. 16 3. 16 3. 16 3. 16 3. 73 3. 16 3. 16 3. 3. 16 3. 3. 16 3. 3. 16 3. 3. 16 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4
Morgan City and Algiers 3		2.		2. 73	2.88	2.86	3.01			2. 73	3.03	2.86	
Fort Hancock helperLiberty helper	2. 70 2. 50	2. 2. 2.		2. 84 2. 63	2. 99 2. 88	2. 97 2. 75	3. 12 3. 01			2.84 2.63	3. 14 3. 03	2. 97 2. 75	
•			1	ylin	r 18	Eng	ines	with c	ylinder mo	s 18 in nth).	cheş a	and ov	er (per
Branch service.				mon	(per th).		Class 1	١.	Class B.			Class	C.
			190	7 4	1910	1907	4	1910	1907 4	1910	19	07 4	1910
PASSENGER SERVICE	E.												
Eagle Pass branch			67. 67.	50 10 50 50 50	\$72.00 3.31 7 2.81 72.00 72.00	3. 75. 75.	44 00 00	79. 50 3. 65 73. 10 79. 50 79. 50	\$78.75 3.612 77.75 77.75 77.75	\$83. 2 3. 8 7 3. 2 83. 2 83. 2	32   3 25   82 25   82	. 50 . 784 . 50 . 50	\$87.00 3.99 7 3.40 87.00 87.00

<sup>&</sup>lt;sup>1</sup>Rates fixed in 1903 are shown where no change was indicated in the revised schedule of 1907.

<sup>2</sup>Firemen on Mallet type engines paid \$4 per 100 miles or less in 1910. On simple coal-burning engines having cylinders 24 inches or over in diameter and on coal-burning compound engines weighing 215,000 pounds or more on drivers, firemen in 1910 paid \$3.75 per 100 miles or less.

<sup>Overtime 20 cents per hour unless otherwise specified.
Overtime 25 cents per hour.
Per round trip of 13 hours and 45 minutes.
Per day of 11 hours and 42 minutes.</sup> 

# Rates of pay of locomotive firemen—Continued.

		Oil-	burning	locomoti	ives.	
	Clas	s A.	Clas	s B.	Clas	s C.
	1907 1	1910	1907 1	1910	1907 1	1910
MIXED AND FREIGHT SERVICE.  Eagle Pass branch 2 Gonzales branch		\$74.62 67.00	3 \$74. 26 65, 63	\$78.16 70.13	<sup>3</sup> \$77. 79 68. 75	\$81, 69 73, 25
La Grange branch VICTORIA—PORT LAVACA.	3 70.00	74. 50	3 73. 50	78.00	3 77. 00	81. 50
Cuero-Victoria 4 Port Lavaca branch Beeville and Victoria branch Wharton-Palacios branch Hawkinsville branch Clinton branch 2 Harrisburg-Clinton branch 4 Sour Lake branch 7 Sabine Pass branch 8 Lacassine branch 9 Eunice-New Heria branch 10	67.50 3 2.82 3 3.37 67.50	3. 03 72. 00 2. 99 3. 58 72. 00 65. 40 2. 90 87. 00 79. 50	3 3.00 70.88 3 2.96 3 3.54 70.88 64.58 3 2.89 86.63 3 78.75 76.13	3. 17 75. 38 3. 13 3. 75 75. 38 68. 48 3. 04 91. 13 83. 25	3 3. 15 74. 25 3 3. 10 3 3. 71 74. 25 67. 65 3 3. 03 90. 75 3 82. 50	3. 31 78. 75 3. 27 3. 91 78. 75 71. 55 3. 18 95. 25 87. 00
Lacassine branch 9. Eunice-New Iberia branch 10. Alexandria branch 11. Salt Mine branch 12. Cypremort branch 13. Houma branch 14.	3 75. 00 72. 50 75. 00 3 82. 50 67. 50 75. 00 75. 00	77. 00 79. 50 87. 00 72. 00 79. 50 79. 50	76. 13 78. 75 3 86. 63 70. 88 78. 75 78. 75	80, 63 83, 25 91, 13 75, 38 83, 25 83, 25	79. 75 82. 50 3 90. 75 74. 25 82. 50 82. 50	84. 25 87. 00 95. 25 78. 75 87. 00 87. 00
		Coal	-burning	locomot	ives.	
	Clas	s A.	Clas	s B.	Clas	s C.
	1907 1	1910	1907 1	1910	1907 1	1910
MIXED AND FREIGHT SERVICE.						
Eagle Pass branch <sup>2</sup> Gonzales branch La Grange branch VICTORIA—PORT LAVACA.	3 \$70. 72 62. 50 3 70. 00	\$78. 52 71. 50 79. 00	3 \$74. 26 65. 63 3 73. 50	\$82.06 74.63 82.50	3 \$77.79 68.75 3 77.00	\$85. 59 77. 75 86. 00
Cuero-Victoria 4. Port Lavaca branch. Beeville and Victoria branch 5. Wharton-Palacios branch 6. Hawkinsville branch. Clinton branch 2. Harrisburg-Clinton branch 4. Sour Lake branch 7. Sabine Pass branch 8. Lacassine branch 9. Eunice-New Iberia branch 10. Alexandria branch 11. Salt mine branch 12. Cypremort branch 13. Houma branch 14.	72.50 75.00	3, 20 76, 50 3, 15 3, 78 76, 50 69, 30 3, 05 91, 50 84, 00 91, 50 84, 00 91, 50 84, 00	3 3. 00 .70. 88 3 2. 96 3 3. 54 70. 88 64. 58 3 2. 89 86. 63 78. 75 3 86. 63 70. 88 78. 75	3. 34 79. 88 3. 29 3. 95 79. 88 72. 38 3. 19 95. 63 87. 75 85. 13 87. 75 95. 63 79. 88 87. 75 87. 75	3 3. 15 74. 25 3 3. 10 3 3. 71 74. 25 67. 65 3 3. 03 90. 75 3 82. 50 79. 75 82. 50 3 90. 75 74. 25 82. 50	3. 48 83. 25 3. 43 4. 12 83. 25 75. 45 3. 33 99. 75 91. 50 99. 75 83. 25 91. 50

Overtime 20 cents per hour, not less than 30 minutes counted; all over 30 minutes one hour.

Per month of 26 or 27 days.

Overtime 25 cents per hour, not less than 30 minutes counted; all over 30 minutes one hour.

Per day of 11 hours and 20 minutes.

Per day of 11 hours.

Per round trip of 13 hours and 45 minutes.

Switching at Nome and Sour Lake.

Switching at Sabine.

Switching at Eake Arthur.

Switching at Eunice; two firemen.

Two firemen.

Switching at Salt Mine and New Iberia.

Wo firemen.
 Switching at Salt Mine and New Iberia.
 Switching at Cypremort, Franklin and Weeks Island.
 Switching at Houma and Shriever.

# Rates of pay of locomotive firemen-Continued.

Class of service.	Rate p	er day.	Overtime (per hour).		
	1907	1910	1907	1910	
Switching: First-class yards. Second-class yards.	\$2.25 2.15	\$2.50 2.40	\$0.22½ .21½	\$0. <b>2</b> 5 . 24	

## SOUTHERN PACIFIC CO .- MOUNTAIN DISTRICTS.

On the mountain districts of the Southern Pacific System firemen in passenger service, as a result of the arbitration award, received an increase in rates of compensation of 15 cents a day. In freight and work train service the rates of pay of firemen were advanced 15 cents a day on oil-burning engines and 30 cents a day on engines burning coal; these increases on a percentage basis ranging from 4.8 to 10.7 per cent in freight and from 5.7 to 12.5 per cent in work train service. In the case of runs of over 100 miles in the aggregate, in freight service, on trip or trips beginning on the same date and scheduled at less than  $12\frac{1}{2}$  miles per hour, firemen received increases in rates of pay per mile ranging from 4.5 to 4.9 per cent on oil-burning engines and from 8.9 to 9.8 per cent on engines burning coal.

In addition to the increases noted above, firemen in local or way freight service on runs over 100 miles in the aggregate, where time was computed on the 10 mile per hour basis, under the rates fixed in 1910 were given a further increase of 25 cents per 100 miles over

through freight rates.

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

		Pa	assenger.12		Freight. <sup>12</sup>						
Class of engine.		e per	Incre	ease.	Rate	e per	Increase.				
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.			
Under 18-inch cylinders. 110,000 to and including 140,000 pounds on drivers:	\$2.85	\$3.00	\$0.15	5.3		•••••					
Oil	2.98	3.13	. 15	5.0	\$2.96 2.96	\$3.11 3.26	\$0.15 .30				
Oil	3.12	3.27	.15	4.8	$\left\{ \begin{array}{l} 3.10 \\ 3.10 \end{array} \right.$	3. 25 3. 40	. 15 . 30	4.8 9.7			
Oil	}				$\left\{ \begin{array}{l} 2.82 \\ 2.82 \end{array} \right.$	2.97 3.12					

		Frei	ght.13			-Work	train.		Between Roseville and Truckee.			
Class of engine.		e per ile.	Incr	ease.		e per	Incr	ease.	Ra	te.	Increase.	
	1907	1910 4	Amount.	Per cent.	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
110,000 to and including 140,000 pounds on drivers: Oil	. 0321 . 0335 . 0335 . 0307	. 0351	. 0015	9.4 4.5 8.9	2. 52 2. 64 2. 64 2. 40	2. 79 2. 94 2. 55	. 15	5.7 11.4		\$0.039 3.75	\$0.00	0.00

1 Between Bakersfield and Los Angeles; Sacramento and Sparks; Red Bluff and Ashland; Ashland and Roseburg; Los Angeles and Indio.
2 100 miles or less; over 100 miles, pro rata.
3 In freight service of over 100 miles in the aggregate, trip or trips beginning on the same date and scheduled at less than 12½ miles per hour.
4 Firemen in local or way freight service on runs over 100 miles in the aggregate where time is computed on the 10 miles per hour basis are paid at the rate of 25 cents per 100 miles in addition to through freight rates, as per class of engine and district.

## Rates of pay of locomotive firemen.

Class of engine.	Passen day	ger, per	Freigh day	nt, per		ht, per	Work train, pe	
	1907	1910	1907	1907 1910		1910 5	1907	1910
Under 18-inch cylinders 6. 110,000 to and including 140,000 pounds on drivers:	\$2.85	\$3.00						
Oil	2.98	3. 13	\$2.96 2.96	\$3.11 3.26	\$0.0321	\$0.0336 .0351	\$2.52 2.52	\$2.67 2.82
Over 140,000 pounds on drivers: Oil Coal Less than 110,000 pounds on drivers:	3.12	3.27	{ 3.10 3.10	3. 25 3. 40	. 0335	.035	2. 64 2. 64	2. 79 2. 94
OilCoal	}		$\left\{ \begin{array}{c} 2.82 \\ 2.82 \end{array} \right.$	2.97 3.12	.0307	.0322	2. 40 2. 40	2. 55 2. 70
Mallet type Simple 24-inch cylinders and over; compound, 215,000 pounds and over		4.00		4.00		.0375		4.00
on drivers. Deadheading, per day.	2.25	2, 25		3.75				3.75
Acting as messengers in charge of dead engines, per day	2.50	2.50						

#### BETWEEN ROSEVILLE AND TRUCKEE.

	Rate pe	er mile.	Rate p	er day.	Rate pe	er mile.
	1907	1910	1907	1910	1907 3	1910 3
Locomotives weighing over 140,000 pounds on drivers	\$0.039	\$0.039	\$3.75	\$3.75	\$0.04	\$0.04

1 100 miles or less; over 100 miles, pro rata.

In freight service of over 100 miles in the aggregate, trip or trips beginning on the same date and sched-

uled at less than 12½ miles per hour.

on drivers.

#### SOUTHERN PACIFIC CO .- PACIFIC SYSTEM.

On the Pacific system of the Southern Pacific Co. a comparison of the schedules before and after the firemen's arbitration of 1910 shows that in the valley districts passenger firemen were granted an increase of 15 cents a day by the arbitration award, while on the lines east of Sparks firemen on passenger engines with cylinders under 18 inches in diameter were awarded an advance of 26 cents a day, and on engines with cylinders 18 inches or over, 28 cents a day. In freight, helper, and work train service in the valley districts firemen had their rates of pay on coal-burning engines increased 30 cents a day; and on oil-burning engines, 15 cents a day by the award of the board. On the lines east of Sparks the advances awarded were higher. On oil-burning locomotives the rate of increase in these branches of service was 27 to 29 cents a day, and on coal-burning engines, 42 to 44 cents a day. Hostlers had their monthly rates of pay advanced from \$80 to \$85, or 6.3 per cent.

<sup>&</sup>lt;sup>2</sup> Between: Bakersfield and Los Angand Roseburg; Los Angeles and Indio. angeles; Sacramento and Sparks; Red Bluff and Ashland; Ashland

<sup>\*10</sup> consecutive hours or less, 100 miles or less.

5 Firemen in local or way freight service on runs over 100 miles in the aggregate where time is computed on the 10 mile per hour basis are paid at the rate of 25 cents per 100 miles in addition to through freight rates, as per class of engine and district.

6 Includes standard gauge consolidation, 8-wheel connected, and Atlantic type less than 110,000 pounds

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration effective May 16, 1910.

					Vall	ley dis	tricts.					
		Passe	enger.		Fre	eight a	nd help	per.1	Work train.			
Class of engine.		Rate per day.		Increase.		Rate per day.		ease.	Rate per day.		Increase.	
	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.	1907	1910	Amount.	Per cent.
Under 18-inch cylinders 18-inch cylinders and over Less than 75,000 pounds on drivers:	\$2.25 2.50	\$2.40 2.65	\$0.15 .15	6.7 6,0								ñ
Oil				::::}	<b>\$2.46</b> {	\$2.61 2.76	\$0.15 .30	6.1 12.2				
drivers; Oil. Coal. 110,000 pounds to and in-				::::}	2.56	2.71 2.86	15 .30	5.9 11.7	\$2.40{	\$2.55 2.70	\$0.15 .30	6.3 12.5
cluding 140,000 pounds on drivers: <sup>2</sup> Oil				::::}	2.69{	2.84 2.99	.15	5. 6) 11. 2}	2.52	2. 67 2. 82	.15	6.0 11.9
drivers: Oil				}	2.82	2. 97 3. 12	.15	5.3 10.6	2.64	2. 79 2. 94	.15	5.7 11.4

					Lines east of Sparks.								
· ·		Passe	enger.		Fre	eight a	nd help	oer.1	Work train.				
Class of engine.		e per	Incr	Increase.  Per cent;  Per cent;		Rate per day.		Increase.		per Inc		ease.	
	1907	1910	Amount.			1910	Amount.	Per cent.	1907	0161	Amount.	Per cent.	
18-inch cylinders and over Less than 75,000 pounds on drivers: Oil	\$2.25 2.50	\$2.51 2.78	\$0.26 .28	11.6	80 AB	\$2.73 2.88	\$0. 27	11.0					
Coal. 75,000 pounds to and including 110,000 pounds on drivers: Oil Coal. 110,000 pounds to and including 140,000 pounds				}	2.56				\$2. 40	\$2.67 2.82	\$0. 27 . 42	11.3 17.5	
on drivers: 2' Oil				::::}	2.69	2.97 3.12	. 28	10.4) 16.0}	2.52	2.80 2.95	. 28	11. 1 17. 1	
drivers: Oil				::::}	2.82	3. 11 3. 26	. 29	10.3 15.6	2.64	2.92 3.07	. 28	10.6 16.3	

Class of service.  Hostlers Arbitrary for firemen on Oakland, Berkeley, Alameda, and Oswego locals	Doto mon	Pa	ay.	Increase.		
Class of service.	Rate per—	1907	1910	Amount.	Per cent.	
Hostlers.	Month	\$80.00	\$85.00	\$5.00	6.3	
Alameda, and Oswego locals	Day	2.75	2.90	. 15	5.5	

On runs of over 100 miles in the aggregate, where time is computed on the 10-mile-per-hour basis, firemen in local or way freight service are paid at the rate of 25 cents per 100 miles in addition to through freight rates as per class of engine and district.
2 Includes standard gauge consolidated 8-wheel connected and Atlantic type locomotive of less than 110,000 pounds on drivers.

# Rates of pay per day of locomotive firemen.

	Valley districts.										
Class of engine.	Passe	nger.1	Freigh help		Work train.						
	1907	1910	1907 3	1910 4	1907 5	1910 6					
Under 18-inch cylinders	\$2.25 2.50	\$2.40 2.65									
Less than 75,000 pounds on drivers: Oil. Coal. 75,000 pounds to and including 110,000 pounds on driv-			\$2.46 2.46	\$2.61 2.76		\$2.55 2.70					
ers: Oil. Coal. 110,000 pounds to and including 140,000 pounds on driv-			2. 56 2. 56	2.71 2.86	\$2.40 2.40	2. 55 2. 70					
ers: <sup>7</sup> Oil. Coal. Over 140,000 pounds on drivers:			2. 69 2. 69	2. 84 2. 99	2. 52 2. 52	2.67 2.82					
Oil. Coal. Simple locomotives having cylinders 24 inches or over in diameter and on compound locomotives weighing			2. 82 2. 82	2.97 3.12	2. 64 2. 64	2. 79 2. 94					
215,000 or more pounds on drivers		4.00		3. 75 4. 00		3. 75 4. 00					

			L	ines east	of Spark	s.	
	Class of engine.	Passe	nger.1	Freigh help		Work	train.
		1907	1910	1907 3	1910 4	1907 5	1910 6
18-inch cylin	h cylindersders and over	\$2.25 2.50	\$2.51 2.78				
Oil Coal	000 pounds on drivers: s to and including 110,000 pounds on driv-			\$2.46 2.46	\$2.73 2.88		\$2.67 2.82
ers: Oil Coal 110,000 pound	ds to and including 140,000 pounds on			2. 56 2. 56	2.84 2.99	\$2.40 2.40	2. 67 2. 82
Coal	nounds on drivers			2. 69 2. 69	2.97 3.12	2. 52 -2. 52	2. 80 2. 95
Coal Simple locom	notives having cylinders 24 inches or over		1	2.82 2.82	3. 11 3. 26	2.64 2.64	2.92 3.07
in diameter 215,000 or n	r and on compound locomotives weighing nore pounds on drivers.		4.00		3. 75 4. 00		3. 75 4. 00

Hostlers, per month (12 hours constitute a day's work): 1907.	\$80,00
1910.  Oakland, Berkeley, Alameda and Oswego locals, firemen's arbitrary rate, per day:	85. 00
1907 1910	2.75 2.90

<sup>1 100</sup> miles or less.

<sup>1 100</sup> miles or less.
2 On runs over 100 miles in the aggregate, where time is computed on the 10-mile per hour basis, firemen in local or way freight service are paid at the rate of 25 cents per 100 miles in addition to through freight rates as per class of engine and district.
3 In freight, 100 miles or less. In helper, 100 miles allowed for first 10 hours or less; after 10 hours, overtime at the rate of 12½ miles per hour.
4 Freight, 8-hour basis; helper, 10-hour basis. 100 miles or less.
5 Overtime. after 10 hours. at 25 cents per hour; fractions less than 30 minutes not counted; all over 30 minutes, one hour.
6 Overtime por rata after 10 hours.
7 Includes standard gauge consolidated 8-wheel connected and Atlantic type locomotives of less than 110,000 pounds on drivers.

## UNION PACIFIC RAILROAD CO.

The advances in rates of pay to locomotive firemen by the arbitration board's award, as applied on the Union Pacific, may be briefly summarized as follows:

# Increase per day.

Class of service.	Cents.	Per cent.
Work and helper service (all districts) Through freight/service (all districts) Local freight service (all districts) Passenger service (all districts) Switching service (all divisions)	30 55 15	10.0 to 12.2 9.2 to 11.5 16.9 to 21.2 4.9 to 6.4 11.1

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910.

	Allo	listrict	s, work an	d helper.	All through freight districts, except between Cheyenne and Laramie.					
Class of engine.		e per	Incr	ease.	Rate per day.		Incr	ease.		
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.		
1, Atlantic 101, Pacific. 201, consolidated, simple 600, 8-wheel, simple 700, 8-wheel, simple 800, 8-wheel, simple 800, 8-wheel, simple 800, 10-wheel, simple 900, 10-wheel, simple 1000, 10-wheel, simple 1100, switch 1151, switch 1171, switch 1171, switch 1187, switch 1201, switch 1201, switch 1301, consolidated, simple 1500, consolidated, simple 1500, consolidated, simple 1500, consolidated, compound 1600, consolidated, compound 1703, 10-wheel, simple 1800, 10-wheel, simple 1800, 10-wheel, simple 1820, 10-wheel, simple 1820, 10-wheel, simple 1820, 10-wheel, simple	2.80 3 00 2.45 2.45 2.45 2.45 2.45 2.45 2.45 2.45	\$3.00 \$3.10 \$3.30 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.75 \$2.90 \$3.30 \$3.30 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3.00 \$3	\$0.30 .30 .30 .30 .30 .30 .30 .30 .30 .30	11. 1 10. 7 10. 0 12. 2 12. 3 13. 4 14. 4 15. 4 16. 5 16. 5 16	\$2. 95 3. 05 3. 25 2. 70 2. 70 3. 00 2. 85 3. 25 3. 25	\$3. 25 3. 35 3. 55 3. 00 3. 55 3. 55 3	\$0.30 .30 .30 .30 .30 .30 .30 .30 .30 .30	10. 2 9. 8 9. 2 11. 1 11. 1 10. 5 11. 1 11. 1 10. 0 10. 5 9. 2 9. 2		

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

	All districts, except between Cheyenne and Laramie.											
		Lo	cal freight.		Passenger.							
Class of engine.	Rate	per y.	Incre	Rate per day.		Increase.						
	1907 1911		Amount.	Per cent.	1907	1911	Amount.	Per cent.				
1, Atlantic. 101, Pacific. 101, consolidated, simple. 200, 8-wheel, simple. 600, 8-wheel, simple. 600, 8-wheel, simple. 700, 8-wheel, simple. 800, 10-wheel, simple. 800, 10-wheel, simple. 1100, switch. 1171, switch. 1171, switch. 1171, switch. 1211, switch. 1211, switch. 1201, switch. 1201, switch. 1201, switch. 1200, 10-wheel, simple. 1500, consolidated, simple. 1500, consolidated, simple. 1500, consolidated, simple. 1600, consolidated, simple. 1620; consolidated, compound. 1703, 10-wheel, simple. 1820, 10-wheel, compound.	3.05 3.25 2.70 2.70 2.70 2.70 2.70 2.70 2.70 2.70	\$3.50 3.60 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25	\$0.55 .55 .55 .55 .55 .55 .55 .55 .55 .55	18. 6 18. 0 16. 9 20. 4 20. 6 20. 6 20	\$2. 75 2. 85 2. 90 2. 50 2. 50 2. 65 2. 50 2. 35 2. 50 2. 65 2. 65	\$2.90 3.00 3.05 2.65 2.65 2.65 2.65 2.65 2.65 2.65 2.6	\$0.15 .15 .15 .15 .15 .15 .15 .15 .15 .15	5.53 5.22 6.00 6.00 6.07 6.00 6.44 6.00 6.00 5.77 5.52 5.52 5.37 5.52 5.53				

		District between Denver and Laramie.													
	Т	hrough	freigh	ıt.		Local	freight			Passenger.					
Class of engine.		e per	Incr	Increase. Rate per day.			Incr	ease.		e per	Increase.				
	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.	1907	1911	Amount.	Per cent.			
1, Atlantic	2. 60 2. 60 2. 60 2. 95 2. 75 3. 15	\$3.05 3.15 3.45 2.90 2.90 2.90 2.90 2.90 2.90 2.90 2.90	\$0.30 .30 .30 .30 .30 .30 .30 .30 .30 .30	10. 9 10. 5 9. 5 11. 5	\$2.75 2.85 3.15 3.060 2.60 2.60 2.60 2.60 2.60 2.60 2.60	\$3.30 3.40 3.15 3.15 3.15 3.15 3.15 3.15 3.15 3.15	\$0. 55 .55 .55 .55 .55 .55 .55 .55 .55 .55	20. 0 19. 3 17. 5 21. 2 21. 2	\$2. 65 2. 75 3. 05 2. 50 2. 50 3. 50 2. 50 3. 50 3. 50 5. 50	\$2. 80 2. 90 3. 20 2. 65 2. 65 3. 00 3. 20	\$0. 15 .15 .15 .15 .15 .15 .15 .15 .15 .15	5.7 5.5 4.9 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0			
pound	3. 15 3. 15	3. 45 3. 45	.30	9.5 9.5	3. 15 3. 15	3.70	. 55	17.5 17.5	3.05 3.05	3. 20 3. 20	. 15	4.9			
pound	3. 15 2. 95 2. 75 2. 85	3.45 3.25 3.05 3.15	. 30 . 30 . 30 . 30	9. 5 10. 2 10. 9 10. 5	3.15 2.95 2.75 2.85	3. 70 3. 50 3. 30 3. 40	. 55 . 55 . 55 . 55	17.5 18.6 20.0 19.3	3. 05 2. 85 2. 65 2. 75	3. 20 3. 00 2. 80 2. 90	. 15 . 15 . 15 . 15	4.9 5.3 5.7 5.5			
1901, consolidated, com- pound	3. 15	3.45	. 30	9.5	3.15	3.70	. 55	17.5	3.05	3.20	. 15	4.9			

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration, effective May 16, 1910—Continued.

Class of service.	Rate per	r month.	Increase.		
Class of Set vice.	1907	1911	Amount.	Per cent.	
Switching, all divisions Local or way freight: Trains 57 and 58 between Council Bluffs and Columbus. Trains 63 and 64 between Grand Island and North Platte. Trains 159 and 158, Kansas City and Junction City. Trains 159 and 158, Junction City and Salina	1 \$2. 25 87. 00 87. 00 87. 00 87. 00	1 \$2. 50 97. 46 102. 05 94. 80 94. 80	\$0. 25 10. 46 15. 05 7. 80 7. 80	11. 1 12. 0 17. 3 9. 0 9. 0	

<sup>1</sup> Per day.

# Rates of pay of locomotive firemen.1

	aı	ork nd		distr Cheye					Dis			between Denver and Laramie.			
Class of engine.	all	per, dis- ets.		ough ght.	Lo freig	cal ht.2		sen-	Thre	ough ght.	Lo freig	cal ght.2		sen- er.	
	1907	1911	1907	1911	1907	1911	1907	1911	1907	1911	1907	1911	1907	1911	
1, Atlantic 101, Paciac. 201, Consolidated, simple. 600, 8-wheel, simple. 700, 8-wheel, simple. 800, 8-wheel, simple. 800, 8-wheel, simple. 800, 8-wheel, simple. 800, 10-wheel, simple. 1000, 10-wheel, simple. 1100, 10-wheel, simple. 1111, switching. 1171, switching. 1187, switching. 1211, switching. 1201, switching. 1201, switching. 1201, switching. 1201, switching. 1201, consolidated, simple. 1500, consolidated, simple. 1500, consolidated, compound. 1600, consolidated, compound. 1703, 10-wheel, simple. 1800, 10-wheel, simple. 1820, 10-wheel, simple. 1820, 10-wheel, compound. 1901, consolidated, compound.	2. 80 3. 00 2. 45 2. 45	3. 10 3. 30 2. 75 2. 75 2. 75 2. 75 2. 75 2. 75 2. 75 2. 75 2. 75 2. 75 3. 05 3. 30 3. 30 3. 30 3. 90 3. 90	3. 05 3. 25 2. 70 2. 85 3. 25 3. 25	3. 35 3. 55 3. 55 3. 55 3. 55 3. 25	3. 05 3. 25 2. 70 2. 85 3. 25 3. 25	3. 60 3. 80 3. 25 3. 25	2. 85 2. 90 2. 50 2. 50	3. 00 3. 005 2. 65 2. 65 3. 00 3. 05 3. 05 3. 05 3. 05 3. 05 3. 05 3. 00 3. 00 3	2. 85 3. 15 2. 60 2. 60 2. 60 2. 60 2. 60 2. 60 2. 60 2. 60 2. 60 3. 15 3. 15 3. 15 3. 15 2. 95 2. 75 3. 75	3. 15 3. 45 2. 90 2. 90 2. 90 2. 90 2. 90 2. 90 2. 90 2. 90 2. 90 3. 05 3. 45 3. 45 3. 45 3. 45 3. 15	2. 85 3. 15 2. 60 2. 50 3. 15 3. 15 3. 15 3. 15 2. 95 2. 75 2. 85	3. 40 3. 70 3. 15 3. 15	2. 75 3. 055 2. 500 2. 500 2. 655 2. 500 2. 35 2. 500 2. 50 2. 50 2. 50 2. 50 2. 50 2. 50 3. 05 3. 05 3. 05 3. 05 2. 85 2. 65 3. 05 2. 85 3. 05 2. 85 3. 05 3. 05	3, 20 2, 65 2, 65 3, 20 3, 20 3, 20 3, 20 3, 20 3, 20 2, 80 2, 80 2, 80 2, 80 3, 20 3, 20 3, 20 3, 20 4, 20 4, 20 5, 20	
	1	Rate. Overtime.													

Switching service.	10000		0 701 011110.	
	1907	1911	1907	1911
All divisions	\$2. 25	<b>\$</b> 2. 50	(3)	(3)
Class of service.	Rate per month.		Overtime.	
	1907	1911	1907	1911
Local or way freight: Trains 57 and 58 between Council Bluffs and Golumbus Trains 63 and 64 between Grand Island and North Platte Trains 159 and 158, Kansas City and Junction City Trains 159 and 158, Junction City and Salina.	87. 00	4 \$97. 46 4 102. 05 4 94. 80 7 94. 80	(5); (5) (6) (5);	(6) (6) (6) (6)

<sup>1</sup> Rates per 100 miles (except switching service).
2 These rates are exclusive of specified runs shown below.
8 Overtime at one-tenth rate. Ten hours' work constitute a day for which 100 miles is allowed firemen.
4 Three firemen assigned.
6 Overtime after 10 hours per day.
6 Overtime after 10 hours per day no rata.
7 One fireman assigned.

# SOUTHERN RAILWAY AND ORDER OF RAILROAD TELEG-RAPHERS: 1910.

In the arbitration proceedings reviewed in this section the controversy involved stipulations presented to the Southern Railway by the Order of Railroad Telegraphers respecting conditions of employment of members of this order in the service of the railroad. movement embraced approximately 1,650 employees, including operators whose duties also involved service as station agents and clerks, as well as those exclusively engaged in telegraph service. ment to arbitrate was signed April 15, 1910, the railroad company selecting as arbitrator J. S. B. Thompson, assistant to the president of the Southern Railway, and the employees selecting John J. Dermody, of Cincinnati, vice president of the Order of Railroad Telegraphers. These arbitrators being unable to agree upon a third, the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor, acting under the provision of the Erdman Act, appointed as the third member of the board William Vance, of the District of Columbia, dean of the George Washington University Law School.

#### DEMANDS OF EMPLOYEES.

The agreement to arbitrate in the present instance followed mediation proceedings in which Federal officials acting in the capacity of mediators under the terms of the Erdman Act had effected a partial adjustment of the matters in dispute between the parties. The unsettled points in controversy included a request by the employees for an increase in rates of pay, and a series of stipulations governing the basis of a day's work, annual leave of absence with pay, conditions with respect to services performed on Sundays and legal holidays, and the scope and significance of the word telegrapher as used in negotiations between the Order of Railroad Telegraphers and the railway company. It was agreed that any wage increase which might be granted should be given in terms of a fixed lump sum, or a percentage of increase on the current pay roll.

With respect to the basis of a day's work, the requests of the employees contemplated a material reduction in the number of hours of daily service required of telegraphers in certain positions, the reduction requested in the case of offices filled by a single employee being from 12 to 10 consecutive hours per day. Concessions of material advantage to the employees were also involved in the stipulations respecting leave of absence with pay, and services performed

on Sundays and legal holidays.

# AWARD OF THE BOARD OF ARBITRATION.

The board of arbitration was organized with Mr. Vance as chairman, and held its first session at Washington on May 24, 1910. The arbitration award was announced June 11, following.

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With respect to the proposed wage increase, the arbitration award was productive of an advance in the rates of pay of the employees involved in the movement, equivalent to 8 per cent of their aggregate earnings, as shown by the pay roll. In conformity with the request of the employees, the board directed that the sum so granted should be distributed to the various positions covered by the award in such manner as should be mutually agreed upon between the company and representatives of the employees, or distributed on a flat percentage basis in the event of no agreement being reached as to such distribution within 15 days from the date of the award.

The findings of the board of arbitration with respect to the proposed rules governing working conditions, as a whole, were also favorable to the employees, the rules submitted to the board, with

modifications in certain details, being granted by the award.

## REQUESTS AND AWARD COMPARED.

The requests of the employees as compared with the findings of the board of arbitration are shown below, the articles of the requests and the award being shown in parallel columns.

## ARTICLE 1.

REQUESTS OF THE ORDER OF RAILROAD TELEGRAPHERS.

All employees performing the duties of a telegraph or telephone operator, whether termed an operator, agent-operator, telephoner, or otherwise, also station agents, and levermen, specified in the schedule, will be considered telegraphers within the meaning of this agreement.

AWARD OF THE BOARD OF ARBITRA-

All employees performing the duties of telegraph operator, or agent-operator, and all those telephone operators who render services in connection with the movement of trains, and all such levermen as are specified in the schedule attached to the contract of submission bearing date April 15, 1910, will be considered telegraphers within the meaning of this agreement, provided that any agent who is required by the employer to perform the services of a telegraph or a telephone operator during any portion of the year shall be deemed an agent-operator and within the provisions of this agreement.

## ARTICLE 2.

(a) At offices where not more than two telegraph operators are employed, 9 consecutive hours, including meal hour, will constitute a day's work.

(b) Where three or more telegraphers are employed, 8 consecutive hours will

constitute a day's work.

(a) At offices where only one telegrapher is employed, 10 consecutive hours, including meal hour, shall constitute a day's work provided, however, that when the needs of the service require that such employees shall meet early or late passenger trains, the time will be extended sufficiently to cover such passenger trains, not exceeding 12 hours. If held on duty for any other purpose for longer than 10 consecutive hours, overtime will be allowed.

(b) At offices where two or more telegraphers are employed, 9 consecutive hours shall constitute a day's work, it being, however, stipulated and agreed that where three or more telegraphers are employed, only 8 consecutive hours of service shall be required of each, except in cases where efficiency of service shall

clearly demand a nine-hour day.

#### ARTICLE 3.

(a) Telegraphers will be excused from Sunday and legal holiday duty when practicable without detriment to the service, and when excused no deduction will be made from their wages; (b) if required to work Sundays or legal holidays they will be paid one day's pay for each Sunday and holiday worked in addition to and pro rata with the monthly rates; (c) when required to meet trains on Sundays or legal holidays, they will be paid an hour for each train met.

Telegraphers will be excused from Sunday and legal holiday duty so far as practicable without detriment to the service, and when so excused no deduction shall be made from their wages.

#### ARTICLE 4.

Telegraphers will be granted 15 days leave of absence each year with full compensation and transportation over their company's lines.

Telegraphers who have been in the service of the company for a period not less than two years and who are required to work on Sundays and legal holidays on the average as much as one-half the number of hours constituting a regular day's work in the positions occupied, shall be granted 15 days leave of absence each year on full pay and with transportation over this company's lines. In determining the number of hours service rendered on Sundays and legal holidays, the employee required to meet trains on such days shall be allowed therefor one hour's time for each train so met.

## ARTICLE 5.

A request for an increase in wages as specified at stations and offices shown in the attached; it being understood that if the arbitrators should grant an increase in wages, it may be given in terms of a fixed lump sum or a percentage of increase on the current pay roll; the aggregate sum thus granted to be distributed to the various positions covered by the award of the arbitrators, as may be mutually agreed upon between the company and the representatives of the employees. In the event that such distribution is not agreed upon within 15 days from the date upon which the award is handed down, such increase shall be distributed as a flat percentage increase to all positions to which it applies.

The wages of the employees included within article 1 of this award shall be increased by an amount equal to 8 per cent of the total amount now paid to them, as shown by the current pay roll; the aggregate sum thus granted shall be distributed to the various positions covered by this award in such manner as may be mutually agreed upon between the company and the representatives of the employees. In the event that such a distribution is not agreed upon within 15 days from the date upon which this award is handed down, such increase shall be distributed as a flat percentage increase to all positions to which it applies.

With the exception of the findings of the arbitration board with respect to the issue involved in article 1 the award was concurred in by each arbitrator. In connection with the award under article 1, a dissenting opinion was rendered by Mr. Dermody, as follows:

I dissent from the terms of article 1 of the award for the reason that it should include station agents' positions where the station agent is not required to telegraph. It being clearly shown by the representatives of the employees that their committee represented a majority of all station agents employed, also by the testimony of the employers that all station agents are classified by them as station agents, there appears no good reason why the station agents as a class should be denied the right of representation.

## APPLICATION OF THE AWARD.

The results of the wage increase awarded by the arbitration board in the form of changes in the rates of pay of individual employees are shown by reference to the terms of the award, the findings of the board having called for an aggregate increase of 8 per cent for the employees as a whole according to such basis of distribution as should be mutu-

ally agreed upon by the two parties.

In addition to the wage increase secured by the employees, a comparison of the schedule governing working conditions in effect before the arbitration with the rules established by the award shows that the basis of a day's work in offices filled by one employee, or by a day operator and a night operator, was fixed at 12 hours per day under the preexisting rules, as compared with 10 consecutive hours per day, including meal hour, in offices filled by a single employee and a day of 9 hours in offices filled by two or more employees under the new rules.

As a result of the arbitration award the employees also secured an amendment to the preexisting rule exempting employees from duty on Sundays, when practicable, so as to extend the exemption to legal holidays, with the further stipulation that when so excused no deduc-

tion should be made from their wages.

As compared with the findings of the board of arbitration with respect to the rule requested by the employees governing annual leave of absence with pay, the rule in force before the arbitration was confined to a stipulation that employees should be granted leave of absence, when practicable, with transportation over the company's lines, no provision being included for leave with pay.

# MISSOURI PACIFIC SYSTEM AND ORDER OF RAILROAD TELEGRAPHERS: 1910.

(The Missouri Pacific Railway Co., including the St. Louis, Iron Mountain & Southern Railway Co., and leased, operated, and independent lines, against the Order of Railroad Telegraphers.)

Arbitration under the terms of the so-called Erdman Act was agreed to in this case on May 14, 1910, the controversy involving the requests of approximately 1,050 telegraphers in the employ of the Missouri Pacific Railway Co. for an increase in rates of pay. On May 27, 1910, joint application was made to the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor by the two parties to the controversy for the appointment of a third arbitrator, the application reciting that the arbitrators selected by the employer and employees had been unable to agree upon a third person to be chosen as a member of the board of arbitration. In connection with the request for the appointment of such arbitrator it was further recited that the parties "hereby further agree to waive mediation provided for in the so-called Erdman Act, and further agree that the amendments to the existing rules in the telegraphers' schedule on said road agreed to by and between the management of said roads and the general committee representing the telegraphers, parties by representation, copies of which said amendments are hereto attached and made a part of this agreement, shall become effective on and after June 1, 1910."

#### DEMANDS OF THE EMPLOYEES.

The agreement for the submission of the controversy to arbitration, as indicated above, was entered into at the conclusion of a series of negotiations involving such amendments to the existing telegraphers' schedule as had been proposed by the employees, exclusive of the proposed change in the wage schedule. The issue submitted to arbitration related solely to the request of the employees for an increase in rates of pay and was set forth in the second article of the arbitration agreement as follows:

It is agreed that the employer has granted to the employee certain amendments to existing rules governing working conditions that will have the effect of increasing the pay roll of the employer to a certain extent.

the pay roll of the employer to a certain extent.

The question to be arbitrated is what amount of increase shall be granted by the employer to the employee in addition to concessions already granted in rules gov-

erning working conditions, above referred to.

Any increase which may be allowed shall be apportioned in such manner as may be agreed upon between the management of the road and the committee representing the employees, provided that in case an increase be granted and such apportionment can not be agreed upon within 15 days from the date on which the decision of the arbitrators is handed down, such increase shall be applied as a flat percentage on the respective rates of pay now in effect.

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#### FINDINGS OF THE BOARD OF ARBITRATION.

As a result of agreement between representatives of the railroad company and the order of railroad telegraphers the board of arbitration as organized for the consideration of the case under review was composed as fellows:

Albert W. Sullivan, general manager Missouri Pacific Railway Co.,

selected by employer.

Frank J. Ryan, commissioner Kansas Board of Railway Commis-

sioners, selected by employees.

W. L. Chambers, lawyer, appointed by the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor.

In response to the issue submitted to arbitration an award was made in favor of the employees, parties to the agreement, for a lump sum of \$50,000 cash per annum, the apportionment of the amount so awarded being left to officials of the company and a committee representing the employees. The award was rendered July 28, 1910, and was made retroactive so as to take effect as of June 1, 1910.

The considerations which governed the board of arbitration in adjusting the requests of the employees for an increase in rates of

pay were set forth in the award as follows:

The evidence was convincing that there has been a material increase in the cost of living since the scale of wages was last adjusted and that the operators are entitled on that account alone to the amount now awarded them. The evidence also disclosed the fact that during a long series of years the railroad company has accumulated a surplus exceeding \$17,000,000, and that during the last two years, in addition to that surplus, the net earnings over and above operating expenses and fixed charges, have exceeded \$3,000,000.

The board, therefore, feels that the award of \$50,000 cash is fully justified, both on the ground of the increased cost of living and upon the operating earnings of the

road.

#### APPLICATION OF THE AWARD.

As stipulated in the arbitration agreement apportionment of the wage increase of \$50,000 awarded the telegraphers by the board of arbitration was made the subject of negotiations following the award, between representatives of the railroad and a committee representing the employees. The resultant change in the rates of pay of these employees as shown by data furnished by the railroad company for use in this analysis was from an average rate of \$65.35 per month under the schedule in effect before the award to an average rate of \$68.06 per month under the wage scale subsequently adopted. The average increase in the rates of pay of telegraphers, therefore, as a result of the arbitration award was \$2.71 per month, or 4.2 per cent.

# DENVER & RIO GRANDE RAILROAD AND BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN: 1910.

Arbitration under the terms of the so-called Erdman law was agreed to by the parties in this case on September 17, 1910, the controversy involving a proposed wage increase for approximately 570 firemen and hostlers employed by the Denver & Rio Grande Railroad. Agreement for the submission of the case to arbitration was entered into as a result of negotiations between representatives of the railroads and officials of the Brotherhood of Locomotive Firemen and Enginemen, representing the firemen and hostlers, no request for mediation or conciliation proceedings having been made by either employer or employees. As members of the board of arbitration, representatives of the railroad nominated W. S. Martin and representatives of the employees nominated W. F. Hynes. These arbitrators, being unable to agree upon a third, the appointment of the third arbitrator was by agreement referred to the chairman of the Interstate Commerce Commission, who appointed W. L. Chambers, of the District of Columbia.

Hearings before the board of arbitration were conducted in the Federal building at Denver, Colo., beginning October 11, 1910. The presentation of testimony was completed October 27, oral arguments being heard the day following. On November 1, the board

announced its award.

#### DEMANDS OF EMPLOYEES.

The proposals of the employees as submitted to arbitration were framed so as to provide for increased rates of pay, both through specific increases in the wage scale and indirectly through changes in rules governing the basis of a day's work and running time of trains in certain classes of service, and in the basis of pay for overtime work. The specific wage increases requested were for the application of the increases granted firemen on western railroads as a result of the firemen's arbitration award of 1910 to the rates of pay in effect on the Colorado and Utah lines of the Denver & Rio Grande as of January, 1907; for a rate of \$4 per day on Mallet type engines in all classes of service; and for an increase of 25 cents per day for switch firemen and a minimum day rate of \$3.25 for hostlers on the Utah lines of the railroad.

#### FINDINGS OF THE BOARD OF ARBITRATION.

Stated in summary form the award of the board of arbitration in response to the requests of the employees involving direct increases in rates of pay was as follows:

The request for the application of the increases established on western railroads as a result of the arbitration award of 1910 to the rates in effect on the Colorado lines of the Denver & Rio Grande was denied, but firemen in standard gauge passenger service, and on all narrow gauge valley mileage were awarded an increase of 6 cents per 100 miles. All narrow gauge valley rates in freight service were increased from 3.12 to 3.27 cents per mile. A day's pay for road firemen was increased 5 cents. On the Utah lines an increase of 15 cents per 100 miles was awarded in all classes of passenger and freight service.

With respect to the rates of pay of firemen employed on Mallet type engines, the board found from the evidence that no engines of this type were in service on the Colorado lines, but awarded that, in the event of the introduction of such engines, firemen should receive 4 cents per mile in all classes of service valley miles; between Salida and Malta, 5 cents per mile; between Minturn and Malta and between Labeta and Sierra 5½ cents per mile, with minimum pay of \$3.20 per day. On the Utah lines a rate of \$4 per 100 miles for firemen employed on Mallet type engines was awarded, as proposed by the employees. In response to the request for an increase in rates of pay of switch firemen on the Utah lines it was ordered that no change be made in the rates of pay of these employees except in the case of such firemen employed at Walsenburg, Rouse Branch, El Moro-Jansen-Reilly Cañon, who were awarded an increase of 31 cents. The rates of pay for hostlers on the system receiving less than \$3 per day were increased 20 cents per day; rates of \$3 per day were increased to \$3.15; and rates of \$3.33 to \$3.45. The overtime rate in this service was fixed at 27 cents per hour on the Utah lines, as compared with a request for a rate of 30 cents.

The findings of the board with respect to the proposals involving changes in rules governing running time of trains, overtime, and the basis of a day's work are set forth below in connection with a statement of the rules requested by the employees, the articles submitted to arbitration, and the findings of the board being shown in parallel

columns.

Colorado lines.

ARTICLE C.

REQUESTS OF EMPLOYEES.

AWARD.

That a permanent running time be established for mixed, through, local, and irregular freight and helper service at a speed of 12 miles per hour on all valley and 60-mile districts, except between Malta and Minturn, and 9 miles per hour on all 44-mile districts, and also on 60-mile districts between Malta and Minturn; overtime computed on 12 miles per hour valley mileage, according to class of engine, unless otherwise provided for in specified service.

ARTICLE D.

That overtime on regular passenger runs shall be computed after the schedule time of train.

Granted.

## ARTICLE E.

That overtime on special passenger or express service will be computed on the average time of the fastest and slowest schedule passenger trains on districts over which such trains move.

## Granted.

## ARTICLE F

That when engines are turned and run in opposite direction the overtime will be figured separately on each trip, time on return trip to be computed from time of departure as shown on train sheet. This to govern places not otherwise covered and not to apply on regular branch runs.

When engines are turned and run in opposite direction the overtime to be figured from the start until the end of the return trip on the basis of the running time. This to govern places not otherwise covered, and not to apply to regular branch runs.

## ARTICLE G.

That on all classes of engines in all classes of service overtime will be computed at the rate of 12 miles per hour, valley miles, at class rates of engines, less than 30 minutes not to be counted, 30 minutes and less than 1 hour to be counted 1 hour, hour for hour, thereafter. This to govern places not otherwise provided for.

Overtime rates per hour on Colorado lines shall be as follows:

On narrow gauge lines in passenger and freight service 30 cents per hour, standard gauge in passenger service 30 cents per hour, standard gauge freight service 33 cents on all engines except Mallet. Mallet type engines 40 cents per hour.

## Utah lines.

#### ARTICLE J.

That overtime on regular passenger runs shall be computed after the schedule running time of trains.

Overtime on special passenger or express service shall be computed as at present on Utah lines.

#### ARTICLE K.

This article embodied the same request as was presented in Article E with respect to the Colorado lines.

Overtime or special passenger or express service shall be computed as at present on Utah lines.

## ARTICLE L.

That when engines are turned and run in opposite direction, the overtime shall be figured separately on each run, time on return trip to be computed from time of departure as shown on train sheet.

When engines are turned and run in opposite directions, overtime shall be figured as at present on Utah lines, 22 miles for passenger and 12 miles for freight.

## ARTICLE M.

That on all classes of engines, in all classes of service, overtime shall be computed at the rate of 12 miles per hour at class rates of engines. Less than 30 minutes not to be counted; 30 minutes and less than one hour to be counted one hour; hour for hour thereafter. This to govern places not otherwise provided for.

Overtime rate per hour on Utah lines to remain as at present on all classes of freight service; in passenger service, the rate to be 29 cents. Ordered that less than 30 minutes not to be counted; 30 minutes and less than 1 hour to be counted 1 hour; hour for hour thereafter. This to govern places not otherwise provided for.

#### ARTICLE N.

That one day's pay will be allowed for 10 hours or less service at freight rates; overtime pro rata, at the following places: Scofield, Clear Creek, and Winter Quarters, Bingham Canyon, Cuprum, Garfield, Welby, Sunnyside, Castle Gate, and Copper Belt; Shay engines.

No change to be made in the present rate of pay per day at points mentioned in this request, except that an increase of 25 cents a day is allowed on Shay engines.

In a dissenting opinion under Articles A and H arbitrator W. F. Hynes referred to the increased cost of living, the increased labor due to the employment of larger engines with greater tractive power involving the consumption of a greater amount of coal, and the increased rates of pay established on railroads connecting and competing with the Denver & Rio Grande Railroad, as a result of the western firemen's arbitration award of 1910, as reasons which he claimed entitled the employees to the specific wage increases asked for. Mr. Hynes further contended that the evidence submitted to the board tending to show that firemen in the employ of the Denver & Rio Grande Railroad were exposed to unusual hazards was not given the consideration that it deserved.

Dissenting from the award under article C, Mr. Hynes contended that the schedule time of trains in the classes of service referred to in this article had been so extended, following wage increases granted in 1903 and 1907, that the aggregate earnings of firemen in 1909, after the addition of these increases, were less than in 1903. The evidence on these points, Mr. Hynes claimed, was conclusive, and the adoption of the rule asked in article C was necessary for the protection of firemen against further extension of the running time of trains without

additional pay.

Dissenting opinions were also filed by Mr. Hynes under articles F, G, K, L, M, N, and O. The operation of the award under article F, Mr. Hynes contended, would result in a reduction in the wages of firemen on such runs, unless modified to conform to the ruling of the chairman that no decreases should be made in connection with the award. With respect to the rule requested under article N, testimony tending to show that the services rendered by firemen in the places mentioned in this section involved unusual hardship was referred to by Mr. Hynes as ground for his conclusion that this request should have been granted.

As a part of the arbitration award it was directed that the wage increases granted by the board should be based on rates of pay provided in schedule of the Denver & Rio Grande Railroad of January 1, 1907, and that such increases should be retroactive as of October

6, 1910.

#### APPLICATION OF THE AWARD.

In order to show the practical result of the arbitration on the Denver & Rio Grande Railroad, with reference to increases in rates of pay, the following tables contrast the rates in effect on the Colorado lines in 1907 with those granted by the board of arbitration effective October 6, 1910:

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration.

## COLORADO LINES-PASSENGER SERVICE.

		Pay.		Increase.	
Class of service.	Rate per—	1907	1910	Amount.	Per cent,
Standard gauge: Simple engines, except 220 class. Simple engines, 220 class. Compound engines, except Mallet. Second divisi m.	do	3.00	\$3.00 3.06 3.06	\$0.06 .06 .06	2. 0 2. 0 2. 0
Malta and Leadville-Minturn— Simple engines, under 220 class. All compound engines, except Mallet and 220 simple. Fourth divisi. n—	Miledo		.05	.001	2.0 2.0
La Veta-Sierra— Simple engines under 220 class. All compound engines, except Mallet and 220 class, simple.	do	.049	.05	.001	2. 0 2. 0
Narrow gauge: Day's pay for road firemen— Simple engines. Compound engines. Second division— Blue River branch—	Daydo	2. 65 2. 71	2.71 2.77	.06	2.3 2.2
Simple engines	Miledo	.0442	.0451	. 0009	2. 0 2. 0
Fourth division— All simple engines. All c. mpound engines	do		. 0616 . 06295	.0014	2.3 2.2
Sunetha— All simple engines All compound engines	do	.0442	.0451	. 0009	2.0

### COLORADO LINES-FREIGHT AND MIXED SERVICE.

			,		 
Standard gauge:					
Pay for road firemen—					
All simple engines except 220 class	Day	2 80	\$2, 94	\$0.05	1.7
All compound engines except Mallet and 220	do	2 95	3, 00	. 05	1. 7
class simple.		2. 30	3.00	.00	1. /
Narrow gauge:					
Pay for road firemen—					
Simple engines	do	9 73	2, 78	. 05	1.9
Compound engines			2. 84	. 05	1.8
First division—		2.10	2.01	. 00	1.0
Simple engines	Mile	. 0312	. 0327	. 0015	4.8
Compound engines			.0334	. 0015	4.7
Second division—		.0019	. 0004	. 0010	2. /
Salida-Malta-					
Simple engines	do	. 0434	. 04557	. 00217	5.0
Compound engines	do	. 0444	. 04656	. 00217	4. 9
Blue River Branch—		.0111	. 01000	. 00210	4. 9
Simple engines	do	. 0442	. 0463	. 0021	4.8
Compound engines	do	. 0452	.0473	. 0021	4.6
Third division-		.0402	.0110	. 0021	2. 0
Poncha to 2 miles east of Sargent, Maysville-					
Monarch, Cimarron-Cedar Creek, Poncha-					
Poncha Pass, Villa Grove-Orient—					
Simple engines	do	. 0602	. 06318	. 00298	5.0
Compound engines	do	. 0616	. 0645	. 0029	4. 7
Balance of narrow gauge district—		.0010	. 0010	. 0023	2. 1
Simple engines	do	. 0312	. 0327	. 0015	4.8
Compound engines	do	. 0319	. 0334	. 0015	4. 7
Fourth division—		.0013	. 0001	.0010	7, 1
Alamosa-Cumbres	1				
Simple engines	do	. 0312	. 0327	. 0015	4.8
Compound engines		. 0319	. 0334	.0015	4. 7
Cumbres-Chama-		. 0015	. 0001	.0010	3. 1
Simple engines	do	. 0602	. 06318	. 00298	5, 0
Compound engines			. 0645	. 0029	4. 7
Chama-Durango and Silverton Branch-		. 0010	10010	. 0020	
Simple engines	do	. 0312	. 0327	. 0015	4.8
Compound engines	do	. 0319	. 0334	. 0015	4.7
Santa Fe Branch-Embudo Barranca-					
Simple engines	do	. 9602	. 06318	. 00298	5.0
Simple engines Compound engines	do	. 0616	. 0645	. 0029	4.7
			,		

Amount and per cent of increase in rates of pay of locomotive firemen as a result of the award of the board of arbitration—Continued.

## COLORADO LINES-FREIGHT AND MIXED SERVICE-Continued.

		P	ay.	Increase.	
Class of service.	Class of service. Rate per—		1910	Amount.	Per cent.
Narrow gauge—Continued. Fourth division—Continued. All other mileage on Santa Fe Branch— Simple engines Compound engines. Pagosa Springs Branch, Altura-Halls and Dykes-Sunetha—	Mile	. 0319	. 0334	\$0.0015 .0015	4.8
Simple engines . Compound engines . Balance of mileage on Pagosa Springs Branch—	do	.0442	.0463	.0021	4.8 4.6
Simple engines  Compound engines	do	.0312	.0327	.0015 .0015	4.84.7

A study of the foregoing tables shows that the rates of pay of the firemen in passenger service were increased 2 per cent for all classes of standard gauge engines and from 2 per cent to 2.3 per cent on narrow gauge engines. In the latter class the maximum increase of 2.3 per cent was allowed road firemen on simple engines working on a day basis and firemen on simple engines on the fourth division paid at a

rate per mile.

Road firemen in the freight and mixed service handling standard gauge simple engines, except 220 class, and compound engines, except Mallet and 220 class simple, were granted a flat increase of 1.7 per cent as a result of the arbitration. On narrow gauge engines for all divisions, and including both simple and compound engines, increases in rates of pay were gained of from 1.8 per cent to as high as 5 per cent. The increase on the narrow gauge engines exceeded 4 per cent in all except two instances.

# XIII.

COAL AND COKE RAILWAY CO. AND BROTHERHOOD OF LOCO-MOTIVE ENGINEERS, BROTHERHOOD OF LOCOMOTIVE FIRE-MEN AND ENGINEMEN, ORDER OF RAILWAY CONDUCTORS, AND BROTHERHOOD OF RAILROAD TRAINMEN: 1911.

The arbitration case described below was a concerted movement by the train service employees of the Coal & Coke Railway Co. to secure from the company certain changes in working conditions and an increase in rates of pay. Stipulations for arbitration under the terms of the so-called Erdman law were signed by the parties April 1, 1911. The employees selected as their arbitrator, P. H. Morrissey, president of the American Railroad Employees' and Investors' Association, and the railway company selected H. B. Spencer, vice president of the Southern Railway Co. At the request of these arbitrators, Wendell P. Stafford, justice of the Supreme Court of the District of Columbia, was appointed by the chairman of the Interstate Commerce Commission and the United States Commissioner of Labor as the third arbitrator. The board of arbitration organized with Judge Stafford as chairman, and held its first session at Washington, D. C., on May 8, 1911. The arbitration award was rendered May 27, being made retroactive so as to go into effect April 1, 1911.

### DEMANDS OF THE EMPLOYEES.

The rules respecting rates of pay and working conditions proposed by the employees were presented to the board of arbitration in a series of schedules designated by the letters of the alphabet A to C, inclusive, schedule A relating to conductors, baggagemen, flagmen, brakemen, and yardmen; schedule B, to engineers; and schedule C, to firemen. In article 2 of the arbitration agreement it was stipulated that the—

Board of arbitration shall have the right to decide that the employer shall accept all the rules and rates of pay provided in the said schedules, or none of them or any part of them, or any modification of them that the said board may prescribe; or said board shall have the power to fix and determine what wages shall be paid to said employees and what the hours of labor and rules relating to such wages and hours of labor shall be.

At the time of the arbitration the rates of pay of passenger conductors, baggagemen, and brakemen were \$110, \$72, and \$65 per month, respectively. In the wage scale submitted to arbitration payment of these employees on a mileage basis was requested at rates of 2.68 cents per mile for conductors, 1.55 cents per mile for baggagemen, and 1.5 cents per mile for brakemen. A monthly guaranty in the case of regularly assigned passenger conductors, baggagemen, and brakemen who were ready for service the entire month, and who did not lay off of their own accord, of \$125, \$75, and \$70 per month, respectively, was also requested. In connection with this request it was proposed that the minimum mileage allowance and pay for each

day used should be not less than \$4.20 for conductors, \$2.75 for

flagmen, and \$2.55 for brakemen.

The wage scale proposed by the employees involved in through and irregular freight service increases in rates of pay ranging from approximately 5 per cent for flagmen to 10 per cent for conductors and brakemen; in local freight service increases ranging from approximately 17 per cent for flagmen to 20 per cent for conductors, 23 per cent for brakemen, and in work and wreck train service increases of 26 per cent for flagmen, 21 per cent for brakemen, and 30 per cent for conductors. The new wage scale also involved increased rates of pay for conductors and trainmen in mixed train and in yard service.

In the case of engineers a rate of 3.85 cents per mile, with the proviso that runs of less than 100 miles either straightaway or turn around should be paid for as 100 miles, was requested in lieu of the existing rate of \$4.50 per day. In local, pick-up, and through freight service increases ranging from 14 to 17 per cent, in work and wreck train service an increase of 33\frac{1}{3} per cent, and in yard service an increase of 30 per cent were requested as compared with

the existing rates.

The wage scale governing the rates of pay of firemen, as submitted to arbitration, involved increases in the rates of compensation of these employees of approximately 15 per cent in local and pick-up freight service, 10 per cent in through freight service, and 20 per cent in work, wreck, and yard service. In passenger service a rate of 2.25 cents per mile, with the proviso that runs of less than 100 miles either straightaway or turn around should be paid for as 100 miles, was requested in lieu of the existing rate of \$2.50 per day.

The stipulations respecting working conditions presented to the board of arbitration in connection with the proposed wage scale involved, among other changes in the existing rules, a reduction in the number of hours constituting a day's work in freight and mixed train service from 11 to 10 hours per day. Material changes were also requested in the rule governing the rights of employees in case of suspension, dismissal, or the imposition of discipline for any offense. The new rules to a great extent related to working conditions which had not previously been made the subject of written agreement between the railway company and the employees.

## FINDINGS OF THE BOARD OF ARBITRATION.

The detailed requests of the employees, as compared with the

findings of the board of arbitration, are shown below.

Summed up briefly, the wage scale established as a result of the arbitration involved increases in rates of pay ranging in freight and mixed train service from 6.3 to 9.1 per cent; in work and wreck train service, from 20 to 33.3 per cent; and in yard service, from 14.3 to 25 per cent. In passenger service engineers and firemen were awarded a minimum allowance for each day used of \$4.50 and \$2.50, respectively, as compared with a corresponding allowance before the award for a day's work of more than 6 hours and not exceeding 10 hours, and pay for actual time only for service of 6 hours or less. Conductors, baggagemen, expressmen, brakemen, and flagmen in passenger service were awarded a minimum daily allowance for each day used of \$4.10, \$2.70, and \$2.45, respectively, compensation for

service of 6 hours or less before the award having been limited to payment for time actually worked at the pro rata rate for a full day

of 10 hours.

In the comparison of the award of the arbitration board with the requests of the employees the articles of the requests and the awards are shown in parallel columns, the schedules governing engineers being presented first, followed by the schedules governing firemen, and conductors and trainmen, in the order mentioned.

## ARTICLE A.

#### REQUESTS OF LOCOMOTIVE ENGINEERS. Passenger engineers, per mile.. \$0.0385 Local freight, per mile..... . 0450 Pick-up freight, per mile..... . 0440 Through freight, per mile..... Work and wreck, per day..... 4.00 Yard engineers, per day of 10 3, 90 hours or less..... Overtime. Passenger engineers, per hour... . 40 All freight engineers, per hour... . 45 Work and wreck engineers, per . 40 hour..... Yard engineers..... . 39

Passenger service.—Straight-away run-around runs making over 100 miles will be paid on a mileage basis, overtime at rate of 20 miles per hour. Under 100 miles, either straight away or turn around, will be paid as 100 miles, overtime at rate of 20 miles per hour.

Regular assigned passenger engineers called for service before and in addition to their regular run, before trips or before registering off duty, will be paid as follows:

One hour or less	\$0.40
One to 5 hours	2.00
Over 5 hours and less than 10	
hours	4.00

In all freight service.—Unless otherwise specified, 100 miles or less, 10 hours or less, either straight away or turn around, to constitute a day. Over 100 miles or 10 hours to be paid pro rata. Overtime

at rate of 10 miles per hour.

Engineers not assigned to a regular run may be used for more than one class of service in one day or trip, and shall be paid the higher rate of pay for service performed, 10 hours or less, 100 miles or less to constitute a day. Over 10 hours or 100 miles to be paid pro rata. First 30 minutes not to count; over 30 minutes 1 hour.

AWARD OF BOARD OF ARBITRATION.

Engineers in passenger service will be paid on the following trip basis: Elkins-Charleston...... \$5. 30 Overtime after 8 hours and 48 minutes. Gassaway-Roaring Creek Junction and return, including Coalton trips..... Overtime after 4 hours and 15 5.30 minutes in each direction. Gassaway-Charleston and return, including round trip, Sutton

Overtime on the run Gassaway to Charleston after 4 hours and 36 minutes; Charleston to Gassaway via Sutton, after 5 hours and 15 minutes. One hour extra will be allowed for turning train at Charleston.

The minimum daily allowance for engineers in passenger service to be: \$4.50 for 10 hours or less; overtime pro rata.

The working time of engineers will begin at the time train is scheduled to leave, and will continue until relieved from duty at end of run. In computing overtime, less than 30 minutes will not be counted. Thirty minutes, and less than 1 hour, will be counted 1 hour. passenger overtime to be paid at the rate of 45 cents per hour.

All excursion service and other special passenger trips not provided for above will be paid on the basis of the minimum rate and overtime herein contained.

Passenger engineers regularly assigned and called for emergency service before, or in addition to, their regular runs, before trips or before registering off duty, will be paid for such service on hourly basis at regular overtime rate. If over 5 hours are used in such service, they will be paid the minimum daily passenger rate and overtime if earned.

Freight and mixed, per mile	\$0.0415
Work and wreck, per day (10	
hours or less)	4.00
Yard engineers 1 per day (10	
hours or less)	3, 55

# Overtime.

All freight engineers (cents per hour)	41. 5
Work and wreck engineers (cents	
Yard engineers (cents per hour)	40 35, 5

In all freight and mixed train service, including mine runs, and pusher or helper service, 100 miles or less, or 10 hours or less will constitute a day's work; that on runs of 100 miles or less overtime will be paid for time in excess of 10 hours, and on runs over 100 miles overtime will be paid for the time used in excess of the time necessary to complete the trip at an average speed of 10 miles per hour. The working time of the men will begin at the time they are scheduled to leave or time called to leave initial terminal, unless they leave earlier, and will continue until they are relieved from duty at the end of the run.

Overtime will not commence until after expiration of 30 minutes in addition thereto, the 30 minutes to be reckoned as 1 hour.

Engineers in all freight service may be assigned to turn-around service out of terminals regardless of the first-in first-out rule until 100 miles, or 10 hours, have been made.

#### GENERAL RULES.

Section 1. Engineers who voluntarily leave the service, and who may subsequently be reemployed on this road, shall rank in seniority as new men. Those discharged from the service and reinstated within less than one year shall not be required to pass a medical examination, nor shall they lose their seniority, but if reemployed after one year, shall rank as new men.

Seniority shall take precedence in all cases as to choice of run on any district, providing the senior man is competent.

Engineers shall hold their rights in seniority in both road and yard service. No engineer shall be hired or fireman-promoted for yard service. All engineers hired or firemen promoted shall take their places on extra board and shall be in line for regular service in both yard and road service when vacancies occur.

Section 1. A record will be kept showing the age of employees in service and lists will be posted on Gassaway bulletin board. In making promotions, qualifications will govern: that is, record, ability, and seniority. The seniority lists as now published shall govern, and the rights of employees shall extend over the entire road.

An employee dismissed for cause may be reinstated if application for same is made in writing within six months of the date of such dismissal.

Regular runs will be assigned, preference being given to senior men who are qualified. When a regular run becomes vacant it will be advertised and will be given to the oldest qualified employee in that branch of the service applying for it. And in case the senior man declines he shall not be entitled to claim it later until it again becomes vacant, or until there is a change in runs or conditions. But a senior man who declines a run does not thereby lose his seniority rights except as to that run, and under the conditions then existing and providing a qualified man in service is available who desires the run. Engineers assigned to regular runs shall run the same regardless of engines.

Sec. 2. Engineers will be called when possible 1 hour and 30 minutes before their time to leave, their time to be taken from the engineer's time ticket, and to begin 30 minutes before time they are called to leave. Engineers will be notified in writing when time is not allowed as per time ticket, and the reason for nonallowance given.

SEC. 3. No engineer shall be suspended or dismissed in serious cases except temporarily pending investigation without a fair and impartial trial. All parties interested must be present at the investigation, but witnesses may be examined separately, and in the event of conflicting testimony those whose evidence conflict will be brought together. The trial must be held within seven days and the engineer advised of the decisions. He shall not be suspended pending trial for minor offenses. In case he is unjustly suspended, he shall be paid for the time lost. He shall have the right to appeal to the general officers, and in all cases may be represented by two members of the committee.

Sec. 4. Engineers summoned as witnesses for the company in the courts or in similar service shall receive their regular rate of pay while in attendance, and their necessary traveling expenses. Engineers when summoned by the company to at-tend investigations shall be paid their regular rate of pay for the actual time lost while attending the investigation, but no traveling expenses.

SEC. 5. When an engineer is called and not used he shall be allowed regular rate per hour for all time held with a minimum of three hours and not lose his turn.

SEC. 6. Engineers deadheading under orders on freight trains will receive their full rate, and on passenger trains one-half their regular rates. Engines running light over the road, except helper engines, will be furnished a flagman, except in emergency cases.

SEC. 7. The seniority of a hired engineer shall date from his first trip, and that of a promoted engineer from the date of his promotion.

Sec. 2. Where callers are employed crews will be called a reasonable time before leaving time of their trains pro-vided they reside within 1 mile of the starting point, except crews assigned to regular runs scheduled to leave between 7 a. m. and 8.30 p. m. Employees will be notified when time

is not allowed as claimed and the reason

therefor given.

Sec. 3. No engineer shall be suspended or dismissed in serious cases except temporarily pending investigation without a fair and impartial trial. All parties interested must be present at the investigation, but witnesses may be examined separately and in the event of conflicting testimony those whose evidence conflict will be brought together. The trial must be held within seven days and the engineer advised of the decision. He shall not be suspended pending trial for minor offenses. In case he is unjustly suspended, he shall be paid for the time lost. He shall have the right to appeal to the general officers, and in all cases may be represented by two members of the committee. In case of an appeal, the appeal must be taken within 30 days of the time decision is rendered, and the appeal must be made in writing and include a statement giving the main points of the case and the points to which exceptions are taken, and the ground for such exceptions.

SEC. 4. Employees held off duty by the company to attend court will be paid for time lost at the regular rate for their respective class of service and in addition their hotel expenses will be paid while held away from home, and such employees will assign their court fees and mileage certificates to the company.

When held out of service to attend an investigation they shall be paid for actual time lost in attending the investigation, but no traveling or other expense shall be allowed. No time will be allowed for attending the investigation if any member of their crew is found to be at fault.

SEC. 5. When an engineer is called and . not used he will be allowed regular rates per hour for all time held with a minimum of three hours and not lose his turn.

Sec. 6. Engineers deadheading under orders will receive one-half their regular rates. Engines running light over the road, except helper engines, will be furnished a flagman, except in emergency cases. An employee who, for reasons of his own, quits work during a day or trip and the employee who relieves him shall each be paid actual time.

Sec. 7. The seniority of a hired engineer shall date from his first trip, and that of a promoted engineer from the date

of his promotion.

SEC. 8. In case an engine is taken from the service on one district and put in service on another or shopped for 10 days or more, the engineer shall be furnished with another engine if possible. If this is not possible, then the youngest engineer shall drop back on the extra list and the aforesaid engineer shall take his engine or turn. This section shall also apply to any change of engines from any part of a district to another.

Sec. 9. Any engineer refusing a run or engine vacant or open to his choice by reason of his seniority rights, forfeits thereby no seniority rights, but can not thereafter claim the run or engine refused in case of its being again vacant or in case he is thereafter deprived of a run which he holds. New and vacant runs to be advertised, application must be made within 10 days. A man being absent on account of sickness, suspension or a leave of absence, if entitled to same, may claim and have the run or engine on his return. When a run is lengthened or shortened 20 miles or more or the home terminal is changed, it shall be considered a new run and be advertised.

Sec. 10. Engineers accepting official or other positions with this company shall not lose their seniority.

SEC. 8. In case an engine is taken from the service on one district and put in service on another or shopped for 10 days or more, the engineer shall be furnished with another engine if possible. If this is not possible, then the youngest en-gineer shall drop back on the extra list and the aforesaid engineer shall take his engine or turn. This section shall also apply to any change of engines from any part of a district to another.

SEC. 10. An employee accepting official position with the company or temporary position in the shops or other class of service shall retain his rights on the road providing he requests and receives a

letter to that effect.

Sec. 11. Engineers not assigned to regular runs will run first in first out.

The number of engineers on extra board will be kept as low as practicable, and when reductions are made the youngest man in point of service will be reduced.

Extra engineers will run first in first out. When an extra engineer gets an extra run or engine he shall hold same until the return of the regular man, except as follows:

When a passenger run is vacant five days or less the oldest available freight engineer, if qualified, will be called for the run and the extra man called for the freight engine. After five days the senior freight engineer will then take the run if he so desires and is qualified.

When a preferred freight run is vacant five days or less the first engineer on extra board will be called. After five days the senior freight engineer will then

take the run if he desires.

SEC. 12. Yard engineers shall be allowed 1 hour for meals between 11.30 and 1.30 for day and night service and when not relieved between these hours shall be allowed 30 minutes for meals and be paid an hour overtime and will not be required to remain on duty over 6 hours without a meal.

The meal hour of crews working "split tricks" will be arranged between the company and the employees affected to suit the local operating conditions and the convenience of the employees, provided, however, that a definite time will be fixed within which employees will be given their meal under the penalty provided in the preceding paragraph.

Sec. 11. Extra engineers shall run first in and first out of all terminals where extra men are employed, with following exceptions:

When it is known that a freight run will be vacant 10 days or longer, the senior extra engineer shall be entitled to it.

When it is known that preferred freight or passenger run is to be vacant, the senior freight engineer at the terminal where vacancy occurs is entitled to same when available and competent, if he desires the run and claims it.

Sec. 12. Yard engineers shall be allowed 1 hour for meals between 11.30 and 1.30, and when not relieved between those hours shall be allowed 30 minutes for meals and be paid 1 hour overtime and will not be required to remain on duty

over 6 hours without a meal.

SEC. 13. When engineers are required to double hills or cut engine off to assist another train, they will be allowed 10 miles for each double, unless the actual mileage exceeds 10 miles, in which case they will be paid actual mileage.

SEC. 14. Engineers dispatched from terminals shall not be relieved until they reach the terminal for which they started or return to the terminal which they left, unless released from changes of turn by a qualified engineer or are tied up for rest.

Sec. 15. In case of passenger transfer, the crews will transfer and proceed. In case passenger engine is disabled, the passenger engineer will take the relief

engine and proceed with the train.

SEC. 16. Engineers on through freight trains who pick up or set off at three or more places on straightaway trip, or two or more places on turn-around trip, will be paid local and pick-up rates for the trip. Bad order cars do not count under this rule. Changing tonnage to meet grade conditions not to be counted.

SEC. 17. At terminals where engine inspectors are employed, they will be held responsible for the inspection of incoming and outgoing engines. This does not relieve the engineer from making the usual inspection and work report.

Sec. 18. When an engineer is displaced by a senior engineer, or a run is taken off, the engineer affected shall have preference of taking any other run he is entitled to by seniority. When an engineer is taken off a run, account unsatisfactory service, he shall be entitled to a run that he can handle satisfactorily, to which his seniority entitles him.
SEC. 19. No engine will be used on main

track or to do yard work, unless in charge of a qualified engineer, except in exchange of passenger engines at terminals.

Sec. 13. When engineers are required to double hills or cut off engine to assist another train, they will be allowed actual mileage at the rate per mile paid on their train with overtime based on the total mileage made at the regular miles per hour basis when it accrues.

Sec. 15. In case of passenger transfer the crew will transfer and proceed. In case passenger engine is disabled the passenger engineer will take the relief engine and proceed with the train.

Sec. 18. When an engineer is displaced by a senior engineer or a run is taken off, the engineer affected shall have preference of taking any other run he is entitled to by seniority. When an engineer is taken off a run on account unsatisfactory service, he shall be entitled to a run that he can handle satisfactorily, to which his seniority entitles him.

SEC. 20. Leave of absence for 30 days or more when granted will be given only in writing and for a period not to exceed 6 months (except in case of sickness), and an employee on leave of absence must keep the officer issuing same advised of his address, and is subject to recall, except in case of sickness, upon 20 days notice.

SEC. 21. Suital protection against the weather will be placed on all engines during the winter months. Coolers will be furnished and ice supplied from May 1 to

October 1 where obtainable.

Sec. 22. If requested, a clearance or service letter will be given an employee leaving the service, stating date entering and date leaving and cause of leaving.

SEC. 20. No engineer will be allowed a longer period than six months leave of absence at any one time, and such leave of absence shall be secured from the superintendent in writing and may be extended in case of sickness.

## APPLICATION OF 16-HOUR LAW.

(a) Employees in train service will not be tied up unless it is apparent that trip can not be completed within the lawful time, and not then until after the expiration of 14 hours on duty under the Federal law, or within two hours of the time limit provided by State laws, if State laws govern.

(b) If employees in train service are tied up in a less number of hours than provided in the preceding paragraph, they shall not be regarded as having been tied up under the law, and their service will be paid for under the provisions of

this schedule.

(c) When employees in train service are tied up between terminals under the law, they shall again be considered on duty and under pay immediately upon the expiration of the minimum legal period off duty applicable to any member of the road crew, provided the longest period of rest required by any member of the crew shall be the period of rest for the entire crew.

(d) Continuous trip will cover the movement straight away or turn around from initial point to the destination train is making when required to tie up. If any change is made in destination after the crew is released for rest, a new trip will commence when the crew resumes

duty.

(e) Employees in train service tied up under the law will be paid continuous time or mileage at their schedules from initial point to tie-up point. When they resume duty on a continuous trip, they will be paid miles or hours, whichever is the greater, from the tie-up point to the next tie-up point or to the terminal. It is understood that this section does not permit engineers to run through terminals unless such practice is permitted under the schedule.

(f) Employees in train service tied up for rest under the law and then towed or deadheaded into terminal, with or without engine or caboose, will be paid therefor as per section (e) the same as if they had run the train to such terminal.

(g) Employees in train service tied up in obedience to law will not be required to watch or care for engines or perform other duties during the time tied up.

(h) Yardmen required to work 16 hours will resume work when the rest period is up under the Federal law, and then be permitted to work 10 hours or paid therefor.

(a) Engineers in train service will not be tied up unless it is apparent the trip can not be completed within the lawful time, and then not until after the expiration of 14 hours on duty under the Federal law, or within two hours of the time limit provided by State law, if State laws govern.

(b) If engineers in train service are tied up a less number of hours than provided in the preceding paragraph, they shall not be regarded as having been tied up under the law, and their service will be paid for under the provisions of this schedule.

(c) When engineers in train service are tied up between terminals under the law, they shall again be considered on duty and under pay immediately upon expiration of the minimum legal period off duty applicable to any member of the road crew, provided the longest period of rest required by any member of the train or engine crew, either 8 or 10 hours, shall be the period of rest for the entire crew.

(d) Continuous trip will cover the movement straight away or turn around from initial point to the destination train is making when required to tie up. If any change is made in the destination after the crew is released for rest, a new trip will commence when the crew re-

sumes duty.

(e) Engineers in train service tied up under the law will be paid continuous time for mileage of their schedule from initial point to tie-up point. When they resume duty on a continuous trip, they will be paid miles or hours, whichever is the greater, from the tie-up point to the next tie-up point or to the terminal. It is understood that this article does not permit engineers to run through terminals unless such practice is permitted under the schedule.

(f) Engineers in train service tied up for rest under the law and then towed or deadheaded into terminal, with or without engine or caboose, will be paid therefor as per section (e) the same as if they had run the train to such terminal.

(g) If an engineer is required to watch or care for engines or perform other duties during the time tied up, he will be paid for such service at regular overtime rates.

(h) Yard engineers required to work 16 hours will resume work when the rest period is up under the Federal law and then be permitted to work 10 hours or paid therefor.

## ARTICLE A.

REQUESTS	OF	LOCOMOTIVE	FIREMEN.

Passenger firemen. Local freight firemen. Pick-up freight firemen. Through freight firemen.	0275 0265
Work and wreck	\$2. 40 2. 40

### Overtime.

		Per nour.
All freight	and passenger service.	\$0. 27
Yards and	work trains	. 24

Passenger service.—Straightaway or turnaround runs making over 100 miles will be paid on a mileage basis, overtime at rate of 20 miles per hour. Under 100 miles, either straightaway or turn around, will be paid as 100 miles, overtime at rate of 20 miles per hour.

of 20 miles per hour.

Regular assigned passenger firemen called for service before and in addition to their regular run, before trips, or before registering off duty will be paid as follows:

One hour or less	\$0. 27
One to 5 hours	1.10
Over 5 hours and less than 10 hours.	2. 25

Overtime on basis of 20 miles per hour. In all freight service.—Unless otherwise specified, 100 miles or less, 10 hours or less, either straightaway or turn around, to constitute a day. Over 100 miles or 10 hours to be paid pro rata. Overtime at rate of 10 miles per hour.

Firemen not assigned to a regular run may be used for more than one class of service in one day or trip, and shall be paid the higher rate of pay for service performed, 10 hours or less, 100 miles or less, to constitute a day. Over 10 hours or 100 miles to be paid pro rata.

In counting overtime, 30 minutes will not be counted. Over 30 minutes will

count one hour.

AWARD OF THE	BOARD	OF	ARBITRATIO	ON.
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Firemen in passenger service will be paid on the following trip basis:
Elkins-Charleston
Overtime after 8 hours and 48 minutes.
Gassaway-Roaring Creek Junction and return, including Coalton
trips \$2. 95
Overtime after 4 hours and 15 minutes in each direction.

Overtime on the run, Gassaway to Charleston after 4 hours and 36 minutes; Charleston to Gassaway via Sutton, after 5 hours and 15 minutes. One hour extra will be allowed for turning train at Charleston.

The minimum daily allowance for firemen in passenger service to be \$2.50 for 10 hours or less; overtime pro rata.

The working time of firemen will begin at the time train is scheduled to leave and will continue until relieved from duty at end of run. In computing overtime, less than 30 minutes will not be counted. Thirty minutes, and less than one hour, will be counted one hour. All passenger overtime to be paid at the rate of 25 cents per hour.

All excursion and other special passenger trips not provided for above will be paid on the basis of the minimum rate and overtime herein contained.

Passenger firemen regularly assigned and called for emergency service before or in addition to their regular runs, before trips or before registering off duty, will be paid for such service on hourly basis at regular overtime rate. If over five hours are used in such service, they will be paid the minimum daily passenger rate and overtime if earned.

Freight and mixed train service	Per mile.
firemen	\$0.026
	Per day.
Work and wreck train firemen	
Yard firemen 2	2. 30

### Overtime.

P	er hour.
All freight and mixed service	\$0.26
Work and wreck train service	. 24
Yard service	. 23

In all freight and mixed train service, including mine runs, and pusher or helper service, 100 miles or less or 10 hours or less, will constitute a day's work; that on runs of 100 miles or less overtime will be paid for time in excess of 10 hours and on runs of over 100 miles overtime will be paid for the time used in excess of the time necessary to complete the trip at an average speed of 10 miles per hour. The working time of the men will begin at the time they are scheduled to leave or time called to leave initial terminal, unless they leave earlier, and will continue until they are relieved from duty at the end of the run. Overtime will not commence until after expiration of 30 minutes in addition thereto, the 30 minutes to be reckoned as one hour.

Firemen in all freight service may be assigned to turn-around service out of terminals regardless of the first-in-first-out rule until 100 miles or 10 hours have been

made.

#### GENERAL RULES.

SECTION 1. Firemen will be called when possible 1 hour and 30 minutes before their time to leave, their time to be taken from the engineer's time ticket and to begin 30 minutes before time they are called to leave. Firemen will be notified in writing when time is not allowed as per time ticket, and the reason for nonallowance given.

SEC. 2. Yard firemen shall be allowed 1 hour for meals between 11.30 and 1.30, and when not relieved between those hours shall be allowed 30 minutes for meals and be paid 1 hour overtime, and will not be required to remain on duty over 6 hours without a meal.

SEC. 3. When a fireman is called and not used he will be allowed regular rate per hour for all time held with a minimum of 3 hours and not lose his turn.

SEC. 4. Firemen used in other service than firemen shall receive their regular rate of pay, except when firemen are used as engineers or pilots, they shall receive the same rate of pay as engineers, and will not be required to fire and pilot at the same time.

SECTION 1. Where callers are employed crews will be called a reasonable time before leaving time of their trains provided they reside within 1 mile of the starting point, except crews assigned to regular runs scheduled to leave between 7 a.m. and 8.30 p.m.

Employees will be notified when time is not allowed as claimed and the reason

therefor given.

SEC. 2. Yard firemen shall be allowed 1 hour for meals between 11.30 and 1.30 for day and night service, and when not relieved between those hours shall be allowed 30 minutes for meals and be paid 1 hour overtime, and will not be required to remain on duty over 6 hours without a meal.

The meal hour of crews working "split tricks" will be arranged between the company and the employees affected to suit the local operating conditions and the convenience of the employees, provided, however, that a definite time will be fixed within which employees will be given their meal under the penalty provided in the preceding paragraph.

Sec. 3. When a fireman is called and not used he will be allowed regular rates per hour for all time held, with a minimum of 3 hours, and not lose his turn.

SEC. 4. Firemen used as pilots will receive rate of pay of engineers.

SEC. 5. Firemen deadheading under orders on treight train will be allowed full pay, on passenger trains one-half pay of the service for which he is called or used.

SEC. 6. Road firemen doubling hills will be allowed actual mileage at the rate per mile paid on that train, 10 miles to constitute the minimum. When an engine is cut off to assist another train, this will be considered a double.

SEC. 7. Crews on through freight trains who pick up or set off at three or more places on straightaway trip, or two or more places on turn-around trip, will be paid local or pick-up rates for the trip, bad order cars do not count under this rule, changing tonnage to meet grade conditions not to be counted.

SEC. 8. Firemen acting as witnesses or attending court under instructions of an official of the company will be allowed the same amount they would have received on their run provided any time is lost and will be paid their actual ex-

penses.

SEC. 9. The seniority of firemen will be dated from the time called after they accept employment as firemen with the company.

Sec. 10. On or before the 1st of January each year a seniority list of firemen shall be renewed and posted at all round-

houses.

SEC. 5. Firemen deadheading under orders will receive one-half their regular rates. An employee who, for reasons of his own, quits work during a day or trip, and the employee who relieves him shall each be paid actual time.

SEC. 6. When firemen are required to double hills or cut off engine to assist another train, they shall be allowed actual miles at the rate per mile paid on their trains, with overtime based on the total mileage made at the regular miles per

hour basis when it accrues.

SEC. 8. Employees held off duty by the company to attend court will be paid for the time lost at the regular rate for their respective class of service, and in addition, their hotel bills will be paid while held away from home, and such employees will assign their court fees and mileage certificates to the company.

When held out of service to attend an investigation, they shall be paid for actual time lost, but no traveling or other expense shall be allowed. No time will be allowed for attending the investigation if any member of their crew is found to be

at fault.

SEC. 9. The seniority of firemen will be dated from the time called after they accept employment as firemen with the

company.

SEC. 10. A record will be kept showing the age of employees in service and lists will be posted on Gassaway bulletin board. In making promotions, qualifications will govern; that is, record, ability, and seniority. The seniority lists as now published shall govern, and the rights of employees shall extend over the entire read

Regular runs will be assigned, preference being given to the senior men who are qualified. When a regular run becomes vacant, it will be advertised and will be given to the oldest qualified employee in that branch of the service applying for it. And in case the senior man declines a run, he shall not be entitled to claim it later until it becomes again vacant, or until there is a change in runs or conditions. But a senior man who declines a run does not thereby lose his seniority rights except as to that run, and under the conditions then existing, and providing a qualified man in service is available who desires the run.

SEC. 11. Firemen will be promoted in accordance with their seniority and if they fail to pass the first examination they will be given a second, and if they fail on the second they will be given a third, provided the three examinations are taken during a period of nine months; should they fail on the third examination, they will be dropped to the bottom of the list. A fireman refusing to take examination as set forth above will lose all rights and become the youngest man on the district at that time. All firemen passing examination will receive a certificate of promotion from the proper official.

SEC. 12. Any fireman having three years actual experience and able to pass all reasonable examinations will be promoted in their order of seniority in preference to employing engineers. In the event of a reduction in staff employed engineers will drop behind the last fireman hired previous to engineer being

employed.

Sec. 13. Firemen passing their first reasonable examination will hold seniority as engineers in relation to each other as they did as fireman. Those who fail on their first examination will stand first in next class promoted.

SEC. 14. Extra firemen shall run first in and first out. When an extra fireman gets an extra run or engine he shall hold such run or engine until the regular man re-

turns, if his services are satisfactory.

Sec. 15. Any fireman refusing a run or engine vacant or open to his choice by reason of his seniority rights forfeits thereby no seniority rights, but can not thereafter claim the run or engine refused except in case of its being again vacant or in case he is thereafter deprived of a run which he holds. New and vacant runs to be advertised; application must be made within 10 days. A man being absent on account of sickness, suspension, or a leave of absence, if entitled to same, may claim and have the run or engine on his return. When a run is lengthened or shortened 20 miles or more or the home terminal is changed it shall be considered a new run and be advertised.

Firemen assigned to regular runs shall run the same regardless of engines.

SEC. 16. Firemen who become eligible for promotion and through no fault of their own are not examined and promoted will rank as engineers ahead of men who are employed as engineers between the time the fireman becomes eligible and the time he is promoted. It will be understood

SEC. 11. Firemen will be promoted in accordance with their seniority when their experience, ability, and record so admits. Those who decline to accept promotion or fail to pass the necessary examinations, as hereinafter provided, will go to the foot of the list or may be placed on the extra list, or may be dropped from the service. If a fireman fails in the second examination, he will be given another examination if he so requests in writing within six months.

SEC. 12. Any fireman having three years actual experience and able to pass all reasonable examinations will be promoted in their order of seniority in preference to employing engineers. In the event of a reduction in staff employed engineers will drop behind the last fireman hired previous to engineer being employed.

SEC. 13. Firemen passing their first reasonable examination will hold seniority as engineers in relation to each other as they did as firemen. Those who fail on their first examination will stand first

in next class promoted.

Sec. 14. Firemen not assigned to regular runs will be run first in first out.

Extra firemen will run first in first out. When an extra fireman gets an extra run or engine he shall hold same until the return of the regular man, except as follows:

When a preferred freight or passenger run is vacant five days or less the first man out on extra board will be called. After five days the senior freight fireman will then take the run if he desires. that firemen are eligible for promotion after three years actual experience in

service as a fireman.

Sec. 17. No fireman shall be suspended or dismissed in scrious cases except temporarily pending investigation, without a fair and impartial trial. All parties interested must be present at the investigation, but witnesses may be examined separately, and in the event of conflicting testimony those whose evidence conflicts will be brought together. The trial must be held within seven days and the fireman advised of the decision. He shall not be suspended pending trial for minor offenses. In case he is unjustly suspended, he shall be paid for the time lost. He shall have the right to appeal to the general officers, and in all cases may be represented by two members of the committee.

SEC. 18. Firemen will be exempted from scouring all brass, painting front ends and stacks, and wiping off their engines. They will, however, keep their cabs inside and out in a creditable con-

dition.

SEC. 19. Firemen will be relieved of cleaning fire and ash pans and sparking out front ends at terminals where hostlers

are employed.

SEC. 20. At terminals all fixed lights to be cleaned and ready for use, and all supplies and tools to be taken off and placed on engine, except double-crewed yard engines. This does not relieve firemen from seeing that all supplies are on engines before going out on their trip. Firemen, however, will not be held responsible for faulty condition of same.

SEC. 21. Firemen will be exempted

from throwing switches when accompa-

nied by train crew.
SEC. 22. Engines running light over road except regular helper engines will be furnished with a flagman when possible.

SEC. 23. Suitable protection against the weather will be placed on all engines during the winter months. Coolers will be furnished from May 1 to October 1, and

ice supplied where obtainable.

Sec. 24. Except in cases of emergency, where directed by the engineer, firemen will not be required to couple or uncouple engines, cut air hose, steam hose, or safety chains.

Sec. 17. No fireman shall be suspended or dismissed in serious cases except temporarily pending investigation, without a fair and impartial trial. All parties interested must be present at the investigation, but witness may be examined separately, and in the event of conflicting testimony those whose evidence conflicts will be brought together.

The trial must be held within seven

days and the fireman advised of the decision. He shall not be suspended pending trial for minor offenses. In case he is unjustly suspended, he shall be paid for the time lost. He shall have the right within 30 days to appeal to the general officers, and in all cases may be represented by two members of the committee.

SEC. 18. Firemen will be required to keep their engine cabs clean inside and out, but will not be required to scour brass, paint front ends and stacks, and

wipe off engines.

Sec. 19. Firemen will be relieved of cleaning fire and ash pans and sparking out front ends at terminals where hostlers are employed.

SEC. 21. Firemen will not be required to throw switches when accompanied by

train crew, except in emergency.
SEC. 22. Engines running light over road except regular helper engines will be furnished with a flagman, when possible.

SEC. 23. Suitable protection against the weather will be placed on all engines during the winter months. Coolers will be furnished and ice supplied from May 1 to

October 1, where obtainable.

SEC. 24. Except in cases of emergency, firemen will not be required to couple or uncouple engines, cut air hose, steam

hose, or safety chains.

SEC. 25. In case of a passenger transfer, the crew will transfer and proceed. In case passenger engine is disabled, the passenger fireman will take the relief engine and proceed with the train.

SEC. 26. If requested, a clearance or service letter will be given an employee leaving the service, stating date entering and date leaving service, and cause of

leaving.

follows:

SEC.,27. Leave of absence for 30 days or more, when granted, will be given only in writing and for a period not to exceed six months, except in case of sickness, and an employee on leave of absence must keep the officer issuing same advised of his address, and is subject to recall, except in case of sickness, upon 20 days' notice.

SEC. 28. An employee accepting official position with the company or temporary position in the shops or other class of service shall retain his rights on the road, providing he requests and receives a letter to that effect.

#### APPLICATION OF THE 16-HOUR LAW.

The requests of the employees and the award of the board of arbitration with respect to rules governing the application of the 16-hour law were the same in the case of locomotive firemen as were shown for locomotive engineers above.

### PASSENGER SERVICE.

REQUESTS OF CONDUCTORS AND TRAIN- AWARD OF THE MEN.

Passenger trainmen will be paid as

	Per mile.
Conductors	\$0.0268
Baggagemen	. 0155
Brakemen	

Regular assigned trainmen in passenger service who are ready for service the entire month, and who do not lay off of their own accord, will receive the following monthly guaranty:

Conductors	\$125
Baggagemen	75
Brakemen	70

exclusive of overtime; and the minimum mileage allowance and pay for each day used will be as follows:

Conductors, not less than	\$4.	20
Baggagemen, not less than	2.	75
Brakemen, not less than	2.	55

exclusive of overtime.

On turn-around runs, no single trip of which exceeds 80 miles, overtime will be paid for all time actually on duty, or held for duty in excess of 8 hours (computed on each run from the time required to report for duty to end of that run) within 12 consecutive hours; and also for all time in excess of 12 consecutive hours computed continuously from time of first required to report to final release at end of run. All other passenger train employees will be paid overtime on the basis of 20 miles per hour, computed from the time required to report for duty until released, and separately for each part of a round-trip run.

AWARD OF THE BOARD OF ARBITRATION.

Passenger trainmen will be paid on the following trip basis:

Charleston-Elkins:	
Conductors	\$4.10
Baggagemen and expressmen.	2.70
Brakemen and flagmen	2.45

Overtime after 8 hours and 48 minutes, Gassaway-Roaring Creek Junction and

Conductors\$4, 10			
	org	\$4.	10
Baggagemen and expressmen. 2.70	men and expressmen.	2.	70
Brakemen and flagmen 2. 45			

Overtime after 4 hours and 15 minutes in each direction.

Gassaway-Charleston and return, in	aclud-
ing round trip, Sutton Branch:	
Conductors	\$4, 50
Baggagemen and expressmen.	

Brakemen and flagmen..... 2.70

Overtime on the run Gassaway to Charleston after 4 hours and 36 minutes; Charleston to Gassaway via Sutton, after 5 hours and 15 minutes. One hour extra will be allowed for turning train at Charleston.

The minimum daily allowance for each day used, exclusive of overtime, will be as follows:

Conductors	\$4. 10
Baggagemen and expressmen	2.70
Brakemen and flagmen	

Ten hours or less to constitute a day's work.

The working time of trainmen will begin at the time train is scheduled to

Overtime in passenger-train service will not commence until after the expiration of 30 minutes in addition thereto, the 30 minutes to be reckoned as one hour, at the following rates:

Per hour. Baggagemen..... Brakemen.....

Regular assigned passenger trainmen called for service before and in addition to their regular run before trips, or before registering off duty, will be paid as follows:

Canduatana

1 hour or less	\$0.42
Over 1 hour and 5 hours or less.	2. 10
Over 5 hours or less than 10	
hours	4, 20
Baggagemen:	
1 hour or less	. 24
Over 1 hour and 5 hours or less.	1. 20
Over 5 hours or less than 10	1. 20
hours	2, 65
Brakemen:	2. 00
1 hour or less	. 24
Over 1 hour and 5 hours or less.	1.20
Over 5 hours or less than 10	
hours	2, 55
210 (11)	2.00

Service in excess of 100 miles will not be considered emergency work as in the

meaning of this rule.

Reductions in crews or increases of mileage in passenger train service from assignment in effect May 31, 1910, will not be made for the purpose of offsetting these increases in wages. This, however, is not to be understood as preventing readjustment of runs in short turn-around service that are paid under minimum rules for the purpose of avoiding payment of excess mileage or overtime that would accrue under these rules without reducing the number of crews, nor is it to be understood as preventing the addition of mileage to runs as new trains are added to the time-table. Through and irregular freight service

will be paid as follows:

•	Per mile.
Conductors	<b>\$0</b> . 0363
Flagmen	. 02525
Brakemen	. 0242

Runs of 100 miles or less, either straightaway or turn around, will be paid for 100

Crews in all freight service may be assigned to turn-around service out of terminals, regardless of the first-in-first-

leave and will continue until relieved from duty at end of run. In computing overtime, less than 30 minutes will not be counted. Thirty minutes, and less than one hour, will be counted one hour.

All passenger overtime to be paid at

the following rates per hour:

Conductors	\$0.41
Baggagemen and expressmen	. 27
Brakemen and flagmen	. 245

All excursion service and other special passenger trips not provided for above will be paid on the basis of the minimum rates and overtime herein contained.

Passenger trainmen regularly assigned and called for emergency service before or in addition to their regular run be-fore trips or before registering off duty will be paid for such service on hourly basis at regular overtime rates. If over five hours are used in such service, they will be paid the minimum daily passenger rates and overtime if earned.

Freight and mixed service will be paid as follows:

	Per mile.
Conductors	\$0.0355
Flagmen	. 0255
Brakemen	

Runs of 100 miles or less, either straight away or turn around, will be paid for 100 miles.

out rule, until 100 miles or 10 hours have been made.

Local freight, mixed train, pick-up, and drop-service men will be paid as follows:

	Per	day.
Conductors	\$3.	975
Flagmen	2.	80
Brakemen	2.	70

Mileage in excess of 100 miles in any day will be paid for in addition pro rata. Trainmen on traveling switchers will be

paid local pick-up rates.

In all freight and mixed-train service, including mine runs, and pusher or helper service, 100 miles or less, or 10 hours or less, will constitute a day's work; that on runs of 100 miles or less overtime will be paid for time in excess of 10 hours, and on runs of over 100 miles overtime will be paid for the time used in excess of the time necessary to complete the trip, at an average speed of 10 miles per hour. The working time of the men will begin at the time they are required to report for duty and do so report, and will continue until they are relieved from duty at the end of the run.

Overtime will not commence until after expiration of 30 minutes in addition thereto, the 30 minutes to be reckoned as one hour for the class of service performed.

Work, construction, or wrecking trains to be paid through freight rates, 100 miles or less, 10 hours or less, to constitute a day's work, and overtime pro rata.

Trainmen deadheading under order on freight trains will receive full freighttrain rates, and on passenger train, onehalf their regular rates. Trainmen running with light engine, or engine and caboose will be paid full through freight rates.

Yard service:	
Conductors—	Per hour.
Day	\$0. 35
Night	37
Brakemen—	
Day	32
Night	34

Ten hours or less to constitute a day's work. Overtime will not commence until after the expiration of 30 minutes in addition thereto, the 30 minutes to be

In all freight and mixed-train service. including mine runs, and pusher or helper service, 100 miles or less, or 10 hours or less, will constitute a day's work; that on runs of 100 miles or less overtime will be paid for time in excess of 10 hours, and on runs of over 100 miles overtime will be paid for the time used in excess of the time necessary to complete the trip, at an average speed of 10 miles per hour. The working time of the men will begin at the time they are scheduled to leave or time called to leave initial terminal, unless they leave earlier, and will continue until they are relieved from duty at the end of the run.

Overtime will not commence until after expiration of 30 minutes in addition thereto, the 30 minutes to be reckoned as

Crews in all freight service may be assigned to turn-around service out of terminals regardless of the first-in-first-out rule until 100 miles or 10 hours have been made.

Work or construction trains to be paid through freight rates, 100 miles or less, 10 hours or less, to constitute a day's work, and overtime pro rata.

Wrecking trains will be paid actual mileage at freight rates to and from the wreck, and the hourly overtime rate

while working at wreck.

Trainmen deadheading under orders will receive one-half their regular rates. Trainmen running with light engine, or engine and caboose will be paid freight rates. An employee quitting work for reasons of his own during a day or trip and the employee relieving him each will be paid for actual time.

Yard service:1	Per ho	ur.
Conductors	\$0.	32
Brakemen		25

Ten hours or less to constitute a day's work and be paid for as 10 hours. If worked more than 10 hours, additional hours will be paid for at the regular

<sup>&</sup>lt;sup>1</sup> Includes service on Sutton Branch performed by Gasaway yard crew.

reckoned as one hour. Yardmen will report for duty at 7 a. m. and 7 p. m., unless the exigencies of the service require other hours.

#### GENERAL YARD RULES.

SEC I. The rules in the trainmen's schedule shall govern yardmen where

they apply.
SEC. II. Where conditions will permit, the established time for day and night yardmen to start work shall be 7 a. m.

and 7 p. m., respectively.

SEC. III. Engines started at other times than between 7 a. m. and 11 a. m.

will be paid night rates.

SEC. IV. In yard service 10 hours or less to constitute a day. Overtime will

be allowed after 10 hours.

SEC. V. One hour will be allowed without pay for meals, commencing between 11.30 and 12.30. If not relieved until 12.30, 30 minutes will be allowed

for meals, and the hour paid for.

SEC. VI. All engines working in yard or transfer shall be equipped with a headlight, footboard, and grab iron on front and rear. Any engine temporarily assigned to such service shall be so equipped at the first opportunity.

SEC. VII. Yardmen will not be required to chain up cars, couple or uncouple air hose in yards or on repair tracks where car repairers are available.

This agreement shall remain in effect until revised or abrogated, of which intention 30 days written notice shall be given.

This agreement not to operate to reduce the compensation now paid for any service under the pay schedule.

horuly rate. Less than 30 minutes will not be paid for. Thirty minutes and less than one hour will be reckoned as one

Yardmen will report for day duty at 7 a. m. and for night duty at 7 p. m., unless the exigencies of the service require

Yard conductors and brakemen shall be allowed one hour for meals between 11.30 and 1.30 for day and night service, and when not relieved between these hours shall be allowed 30 minutes for meals and be paid one hour overtime, and will not be required to remain on duty over six hours without a meal.

The meal hour of crews working "split tricks" will be arranged between the company and the employees affected to suit the local operating conditions and the convenience of the employees; provided, however, that a definite time will be fixed within which employees will be given their meal under the penalty provided in the preceding paragraph.

## APPLICATION OF 16-HOUR LAW.

The requests of the employees and the award of the board of arbitration with respect to rules governing the application of the 16-hour law were the same in the case of conductors and trainmen as were shown for locomotive engineers above, with the exception of article (g), as follows:

(g) Employees in train service tied up in obedience of law will not be required to watch or care for engines or perform other duties during the time tied up.

(g) If an employee in train service is required to watch or care for engine or train or perform other duties during the time tied up, he will be paid for such service at regular overtime rates.

## GENERAL RULES FOR TRAINMEN.

Section 1. Qualifications being equal, seniority shall prevail. All runs and permanent vacancies in assigned service will be advertised on a bulletin board for 10 days, and at the expiration of that time given the oldest employee making appli-cation in writing. Trainmen being disqualified for runs will be given the reason or reasons therefor, in writing, upon request. Failing to make application for a run will not affect seniority except where promotion is involved.

Section 1. A record will be kept showing the age of employees in service and lists will be posted on Gassaway bulletin board. In making promotions, qualifi-cations will govern; that is, record, abil-ity, and seniority. The seniority lists as now published shall govern. The rights of employees shall extend over the entire

Regular runs will be assigned, preference being given to senior men who are qualified. When a regular run becomes qualified.

SEC. 2. Brakemen shall rank from the time they make their first trip for pay. Conductors will be promoted from the ranks of brakemen, and no conductor will be employed when there are men eligible and qualified for promotion. They shall be given 15 days notice to prepare for examination for promotion. If they fail upon the first examination, a second shall be given within 30 days.

SEC. 3. A roster of trainmen will be posted in a conspicuous place in the yard office at terminal, and will be corrected

semiannually.

SEC. 4. Employees will not be disciplined without proper investigation being made, but may be suspended pending an investigation, which shall be held within five days after suspension. They may, if they desire to, choose some conductor, trainman, or yardman to represent them at the investigation. The suspended employee may, if he so desires, be present and hear all the evidence in his case for which he is held out of service. Any actual witness of the occurrence, except discharged employees, may be heard at the investigation. Indefinite suspension shall not be applied as discipline. ord of men who have been suspended from train service and found blameless will remain as previous thereto, and they will be paid full time for time lost, at their regular rate of pay. Men taken out of service will be notified of the cause and length of suspension inside of 72 hours

after the investigation is completed.

SEC. 5. The management accords to any trainman who thinks he has been unjustly dealt with the right to be represented by a committee of adjustment, who shall be given an audience by the proper

official.

SEC. 6. Trainmen discharged from the service of the company will forfeit their seniority, unless reinstated within one year. A trainman leaving the service of his own accord forfeits seniority. A trainman may be given a furlough of six months, and at the end of that time, upon making application to his proper officer, resume his employment without losing his seniority.

vacant it will be advertised and vill be given to the oldest qualified employee in that branch of the service applying for it. And in case the senior man declines a run he shall not be entitled to claim it later until it again becomes vacant, or until there is a change in runs or conditions. But a senior man who declines a run does not thereby lose his seniority rights except as to that run, and under the conditions then existing, and providing a qualified man in service is available who desires the run.

SEC. 2. The seniority standing of brakemen, flagmen, and baggagemen shall date from the time they make their first trip for pay. Conductors will be promoted from the ranks of trainmen, and no conductor will be employed when there are men eligible and qualified for promotion. Candidates for promotion shall be given 15 days to prepare for examination. If they fail upon the first examination, a second shall be given within 30 days.

Sec. 4. Trainmen will not be disciplined without proper investigation being made, but may be suspended pending an investigation, which shall be held within five days after suspension. They may choose a conductor, trainman, or yardman to represent them at the investigation. The suspended employee may be present and hear all the evidence in his case for which he is held out of service. Any actual witness of the occurrence, except discharged employees, may be heard at the investigation. Indefinite suspension shall not be applied as discipline. Record of men who have been suspended from train service and found blameless will remain as previous thereto, and they will be paid full time lost, at their regular rate of pay. Trainmen taken out of service will be notified of the cause and length of suspension inside of 72 hours after the investigation is completed.

SEC. 5. The management accords to any trainman who thinks he has been unjustly dealt with the right to be represented by a committee of employees, who shall be given an audience by the proper official.

Sec. 6. An employee dismissed for cause may be reinstated if application for same is made in writing within six months

of the date of such dismissal.

Leave of absence for 30 days or more, when granted, will be given only in writing and for a period not to exceed six months, except in case of sickness, and an employee on leave of absence must keep the officer issuing same advised of

Sec. 7. All pilots will receive conduc-

tor's pay.
SEC. 8. Through-freightcrews, who pick up or set off at three or more places on straightaway trip, or two or more places on a turn-around trip, will be paid local rates for the trip. Bad-order cars not to count under this rule. Change in tonnage to meet grade conditions not to be counted

SEC. 9. Trainmen doubling hills shall be paid actual mileage at the rate per mile paid on that train, 10 miles to constitute the minimum; said allowance independent of all other time made on the trip.

SEC. 10. Trainmen summoned as witnesses for the company in the courts or similar service shall receive their stated rate of wages if any time is lost while in attendance, and their necessary traveling and hotel expenses. When summoned by the company to attend an investigation, they shall be paid for actual time lost in attending to the investigation, but no traveling expenses.

Sec. 11. So far as practicable, crews will be run so as to give them their lay-

over at the terminal at which they reside. SEC. 12. Trainmen will be notified in writing when time is not allowed as per time slip and reason for nonallowance

SEC. 13. All train crews shall be provided with a coach, caboose, or combination car attached to the rear of train, ex-

cept in emergency cases

Sec. 14. Trainmen will not be required to turn, sand, or coal engines at terminals or, intermediate points where hostlers are employed, except in cases of emergencies. Trainmen required to coal up engines by hand will be allowed a minimum of one hour for each engine coaled; said allowance independent of all other time made on the trip.

SEC. 15. No fines shall be imposed.

SEC. 16. Effort will be made to furnish employment suitable to their capacity to men who are injured while in the discharge of their duty

Sec. 17. All trainmen, except those holding regular runs, will run first in

first out

Sec. 18. Trainmen required to change their runs and by the change obliged to move, family and household goods will be moved free of charge on application to the superintendent.

his address and is subject to recall, except in case of sickness, upon 20 days' notice.

Sec. 7. All pilots will receive conductor's pay.

Sec. 9. Trainmen doubling hills shall be paid actual mileage at the rate per mile paid on their train, with overtime based on the total mileage made at the regular miles per hour basis when it accrues.

Sec. 10. Employees held off duty by the company to attend court will be paid for time lost at the regular rate for their respective class of service and in addition their hotel expenses will be paid while held away from home; and such employees will assign their court fees and mileage certificates to the company

When held out of service to attend an investigation, they shall be paid for actual time lost but no traveling or other expense shall be allowed. No time will be allowed for attending the investigation if any member of their crew is found to be at

fault.

Sec. 11. So far as practicable, crews will be run so as to give them their lay-over at

the terminal at which they reside.

SEC. 12. Trainmen will be notified in writing when time is not allowed as per time slip and the reason therefor.

SEC. 13. All train crews shall be provided with a coach, caboose, or combination car attached to the rear of train, except in emergency cases.

Sec. 14. Trainmen will not be required to sand or coal engines at terminal or intermediate points where hostlers are on duty, nor to turn engines except on Y, except in case of emergency; trainmen required to coal up engines by hand will be allowed the time consumed, with a minimum of one hour for each engine coaled, at regular overtime rates, said allowance to be independent of all other time made on the trip. SEC. 15. No fines shall be imposed.

SEC. 16. Effort will be made to furnish employment suitable to their capacity to men who are injured while in the discharge of their duty.

Sec. 17. All trainmen, except those holding regular runs, will run first in first out.

Sec. 18. Trainmen required to change their runs and by the change are obliged to move their family and household goods will be moved free of charge on application to the superintendent.

Sec. 19. When trainmen are called and not used they will be allowed regular rate per hour for all time held, with a minimum of three hours and not lose their turn.

SEC. 20. When a train crew is run around at terminal they shall receive 100 miles for each run around. Extra men when run around will receive the same as though they had gone out on trip they stood for. Trainmen run around will go to the foot of the list.

Sec. 21. So far as possible, each conductor will at all times be provided with at least one experienced brakeman, and on trains where there are three brakemen assigned to each crew, at least two of them will be experienced men.

Sec. 22. Instructions relative to the movement of trains or the disposition of cars between terminals will be given

trainmen in writing.

Sec. 23. Passenger crews at terminal stations where shifting crews, hostlers, or car inspectors are located will not be required to cut or couple hose, shift trains, or turn engine, except to turn train on Y when necessary.

Sec. 19. When trainmen are called and not used they will be allowed regular rate per hour for all time held with a minimum of three hours and not lose their turn.

Sec. 21. So far as possible, each conductor will at all times be provided with at least one expercienced brakeman, and on trains where there are three brakemen assigned to each crew, at least two of them will be experienced men.

Sec. 22. Instructions relative to the movement of trains or the disposition of cars between terminals will be given

trainmen in writing.

#### GENERAL YARD RULES.

Sec. 6. All engines working in yard or transfer shall be equipped with a headlight, footboard, and grab iron on front and rear. Any engine temporarily assigned to such service shall be so equipped at the first opportunity.

SEC. 7. Yardmen will not be required to chain up cars, couple or uncouple air hose in yards or on repair tracks where

car repairers are available.

This agreement shall remain in effect until revised or abrogated, of which intention 30 days written notice shall be given.

Sec. 6. All engines in yard or transfer service shall be equipped with a headlight, footboard, and grab irons on front and rear. Any engine temporarily assigned to such service shall be so equipped at first opportunity.

SEC. 7. Yardmen will not be required to chain up cars except in case of emer-

gency.

SEC. 8. Where callers are employed, crews will be called a reasonable time before leaving time of their trains provided they reside within 1 mile of the starting point, except crews assigned to regular runs scheduled to leave between 7 a. m. and 8.30 p. m.

Sec. 9. If requested, a clearance or service letter will be given an employee leaving the service, stating the date entering and date leaving the service and

cause of leaving.

## APPLICATION OF THE AWARD.

## (A) RATES OF PAY.

In the series of statements which follow a comparison is made of the rates of pay of engineers, firemen, and conductors and trainmen, in effect on the Coal & Coke Railway before and after the award of the board of arbitration. The comparison is based on the official schedules governing rates of pay and working conditions before and after the award, and is confined to the classes of service for which comparable data could be obtained from these schedules. As a result of the change in the method of fixing the payment of passenger conductors and trainmen from a monthly basis before the award to a trip basis subsequent to the award, the comparative statement in the case of these employees is confined to freight, work, wreck, and mixed train and yard service. The introduction of trip rates as a basis of compensation in passenger service, in the schedules established by the award has also precluded a presentation of the results of the arbitration with respect to the rates of pay of engineers and firemen in this branch of service. As pointed out above, however, the daily rates of pay of engineers and firemen in passenger service under the schedule in effect before the award correspond to the minimum daily allowance for each day used in this branch of service under the rates established as a result of the arbitration.

By referring to the following table it will be seen that locomotive engineers as a result of the award of the board of arbitration received an increase in rates of pay in freight and mixed train service of 7.8 per cent; in work and wreck train service, of 33.3 per cent; and in

yard service, 18.3 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers, as a result of the award of the board of arbitration, effective Apr. 1, 1911.

Class of service.	Rate per day.		Increase.	
CIASS OF SELVICE.	1910 1911	Amount.	Per cent.	
Freight and mixed trains. Work and wreck trains Yard.	\$3.85 3.00 3.00	\$4.15 4.00 13.55	\$0.30 1.00 .55	7.8 33.3 18.3

<sup>&</sup>lt;sup>1</sup> Includes service on Sutton Branch performed by Gassaway yard crew.

In the case of locomotive firemen, as is shown in the following table, increases in rates of pay were secured, as a result of the arbitration award, amounting in freight and mixed train service to 8.3 per cent, in work and wreck train service to 20 per cent, and in yard service to 15 per cent.

Amount and per cent of increase in rates of pay of locomotive firemen, as a result of the award of the board of arbitration, effective Apr. 1, 1911.

Class of service.	Rate per day.		Increase.	
Class of service.	1910 1911	Amount.	Per cent.	
Freight and mixed trains	\$2.40 2.00 2.00	\$2.60 2.40 1 2.30	\$0.20 .40 .30	8.3 20.0 15.0

<sup>&</sup>lt;sup>1</sup> Includes service on Sutton Branch performed by Gassaway yard crew.

As a result of the arbitration award, conductors received increases in rates of pay ranging from 7.6 per cent in freight and mixed train service, to 14.3 per cent in yard service and 26.8 per cent in work and wreck train service. The rates of pay of flagmen were advanced 6.3 per cent in freight and mixed train service, and 27.5 per cent in

work and wreck train service. Brakemen in freight and mixed train service were advanced 9.1 per cent, in work and wreck train service 20 per cent, and in yard service 25 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration.

	Rate per day.		Increase.	
Class of service.	1910	1911	Amount.	Per cent.
Freight and mixed train:     Conductors     Flagmen     Brakemen Work train:     Conductors     Flagmen     Brakemen Wreck train:     Conductors     Flagmen     Brakemen Wreck train:     Conductors     Flagmen     Brakemen Yard:     Conductors     Brakemen Yard:     Conductors     Brakemen	2. 20 2. 80 2. 00 2. 00 2. 00 2. 00 2. 00	\$3. 55 2. 55 2. 40 3. 55 2. 55 2. 40 3. 55 2. 55 2. 40 1 3. 20 1 2. 50	\$0. 25 . 15 . 20 . 75 . 55 . 40 . 75 . 55 . 40	7. 6 6. 3 9. 1 26. 8 27. 5 20. 0 26. 8 27. 5 20. 0

<sup>1</sup> Includes service on the Sutton Branch performed by Gassaway yard crew.

# (B) WORKING CONDITIONS.

In connection with the wage increases awarded by the board of arbitration the structure of rules governing working conditions was enlarged by the award to include stipulations respecting conditions of employment not covered by the official schedule in effect before the arbitration. In the new schedule rules are incorporated as a result of the award governing emergency service, promotion, suspension, dismissal, or the imposition of discipline, special duties, protection against the weather, the meal hour, and special privileges. Stipulations respecting the observance of the law limiting the hours of continuous service of train crews comprise in part the new rules incorporated in the official schedule adopted as a result of the arbitration.

The concessions to the employees involved in the arbitration award with respect to suspension, dismissal, or the imposition of discipline, including the guaranty of a fair and impartial trial or investigation, right of appeal, and pay for time lost through unjust suspension, replace the rule in effect before the award which was confined to a statement that "no employee will be discharged, sus-

pended, or demerited without good and sufficient cause."

In response to the request of the employees the basis of a day's work in freight and mixed train service was reduced from 11 hours to 10 hours or less; service of 10 hours or less in freight and mixed train, as well as in passenger service, involving a full day's pay, as compared with the preexisting rule limiting compensation for service of only 6 hours or less, to payment for time actually worked. In conformity with the award the basis of a day's work in yard, work, and wreck train service is also fixed in the new schedule at 10 hours or less, as contrasted with payment at hourly rates for time actually worked, under the rule in effect before the arbitration.

# XIV.

# RAILROADS IN EASTERN TERRITORY AND BROTHERHOOD OF LOCOMOTIVE ENGINEERS: 1912.

THE ENGINEERS' ARBITRATION IN EASTERN TERRITORY IN 1912.

Early in the year 1912 the Brotherhood of Locomotive Engineers, on behalf of the engineers employed on 52 railroads in the eastern section of the United States, presented a concerted request to the management of these railroads for a general increase in wages and for certain modifications in the rules governing their employment.

The railroads which entered into the concerted movement were as

follows:

Baltimore & Ohio Railroad. Bessemer & Lake Erie Railroad. Boston & Albany Railroad. Boston & Maine Railroad. Buffalo, Rochester & Pittsburgh Railway. Buffalo & Susquehanna Railway. Central New England Railway. Chicago, Indianapolis & Louisville Rail-Chicago, Terre Haute & Southeastern Railway. Chicago, Indiana & Southern Railroad. Cincinnati Northern Railroad. Cincinnati, Hamilton & Dayton Railway. Cleveland, Cincinnati, Chicago & St. Louis Railway Coal & Coke Railway Delaware & Hudson Co. Delaware, Lackawanna & Western Rail-

Erie Railroad. Grand Rapids & Indiana Railway. Hocking Valley Railway Indiana Harbor Belt Railroad. Indianapolis Union Railway. Kanawha & Michigan Railway. Lake Erie & Western Railroad.

Dayton & Union Railroad.

Railroad

Detroit, Toledo & Ironton Railroad

Dunkirk, Allegheny Valley & Pittsburgh

Lake Erie, Alliance & Wheeling Railroad. Lake Shore & Michigan Southern Railway.

Lehigh Valley Railroad. Long Island Railroad. Maine Central Railroad. Michigan Central Railroad. New York Central & Hudson River Rail-

road.

New York, Chicago & St. Louis Railroad. New York, New Haven & Hartford Rail-

New York, Ontario & Western Railway. New York, Philadelphia & Norfolk Railroad.

New York, Susquehanna & Western Railroad.

New Jersey & New York Railroad. Pennsylvania Lines—East. Pennsylvania Lines—West. Pere Marquette Railroad

Pittsburgh & Lake Erie Railroad. Philadelphia & Reading Railway. Toledo & Ohio Central Railway Toledo, St. Louis & Western Railroad.

Vandalia Lines.

Wéstern Maryland Railway. Wheeling & Lake Erie Railroad. West Side Belt Line

Wabash Pittsburgh Terminal Railway. Zanesville & Western Railway.

This concerted movement resulted in conferences held in New York City on March 14, 15, and 25 between representatives of the Brotherhood of Locomotive Engineers and a conference committee of managers representing the railroads. At the last of these conferences the representatives of the railroads declined to grant the requests of the engineers either in whole or in part. This refusal led to a strike vote among the engineers upon the roads concerned, 93.3 per cent of the engineers voting in favor of a strike provided a satisfactory

settlement could not otherwise be made.

In the hope that some means might be found to adjust the matters in dispute without resort to a strike, Martin A. Knapp, presiding judge of the United States Commerce Court, and Chas. P. Neill, United States Commissioner of Labor, tendered their friendly offices to the contending parties. This they did under the terms of the Federal law commonly known as the Erdman Act. Their attempt, however, to settle the difficulty by means of mediation failed, and thereupon they undertook to bring about a settlement of the differ-

ences by arbitration proceedings.

Both sides to the controversy agreed to the principle of arbitration, but they would not accept arbitration under the provisions of the Erdman Act. In consultation with Judge Knapp and Commissioner Neill, it was arranged that the questions at issue be submitted to a board of arbitration consisting of seven members, one to be named by the railroads, one by the engineers, and these two to agree upon five others. It was furthermore arranged that if the first two arbitrators should not be able to agree upon the five others within a period of 15 days after their own appointment, these five were to be selected by a committee consisting of the Chief Justice of the United States, the presiding judge of the Commerce Court, and the Commissioner of Labor.

The railroads selected as their representative Daniel Willard, president of the Baltimore & Ohio Railroad, and the Brotherhood of Locomotive Engineers selected as their representative P. H. Morrissey, former grand master of the Brotherhood of Railroad Trainmen. These two failed to reach an agreement within the allotted time on the other five members to constitute the board. They agreed, however, to a list of names from which they were willing that the other arbitrators should be selected, and from this list the committee named appointed the other five members of the board. The five named by this committee were Oscar S. Straus, of New York City; Dr. Chas. R. Van Hise, of Madison, Wis.; Frederick N. Judson, of St. Louis, Mo.; Dr. Albert Shaw, of New York City, and Otto M. Eidlitz, of New York City, who, together with the two arbitrators selected by the respective parties to this controversy, constituted the board of arbitration provided for in the agreement referred to.

It was also provided in this agreement that a majority of the members of this board should be competent to make a valid and binding award, and each of the parties pledged itself to accept and abide by the award rendered for the period of one year from its effective date, and thereafter subject to the usual 30 days notice. It was also stipulated that the necessary expenses of the board, including the compensation and expenses of its members, stenographers' fees, and all other expenses should be divided equally between the parties to the

It was agreed that the matters in dispute to be submitted to the board for decision should be the requests of the engineers which had been submitted by them to said railroads. These requests were as

follows:

## REQUESTS SUBMITTED TO ARBITRATION.

Passenger rates .- Engines with cylinders of 20 inches or less in diameter, \$4.40 per 100 miles or less. Engines with cylinders over 20 inches in diameter, \$4.60 per 100 miles or less. Miles made in excess of 100, pro rata.

Overtime in through passenger service to be computed on a basis of 20 miles per hour. Overtime will be paid for at 70 cents per hour.

Electric service.—Whenever electric service is installed or now in operation locomotive engineers will take the positions on electric locomotives or multiple-unit trains under the prevailing schedules governing rates of pay and conditions in steam service. Any change from steam to electricity or other motive power in any form at any point on the system, such power will be manned by engineers and paid according to the service for the territory affected, or where electric or multiple-unit trains enter upon steam tracks or tracks formerly operated by steam or where trackage rights are leased to holding companies they shall be operated by engineers operating steam trains on said tracks.

Freight rates.—Engines with cylinders of 20 inches in diameter or less, \$5.25. Engines with cylinders over 20 inches in diameter and less than 24 inches in diameter, \$5.50. Engines with cylinders over

24 inches, except Mallets, \$5.75. Mallet type of engines, \$7.

One hundred miles or less, 10 hours or less, to constitute a day's work. All over 100 miles to be paid pro rata. Overtime to be computed on a basis of 10 miles per hour and paid for pro rata. Through freight rates to apply to all mine runs, work, wreck, pusher or helper, milk, roustabout, and circus trains, according to class of engines. Overtime to be computed on minute basis.

Engineers will be paid at overtime rate for all time over 15 hours held at other than their home terminal.

Twenty five cents per 100 miles or less additional to be added to through freight rates for local freight service according to class of

engines.

Switching service.—Rates for engines in switching service, \$4.50 per day. Ten hours or less to constitute a day's work. All over 10 hours to be paid for pro rata. Overtime to be computed on minute

Belt-line service.—Engineers in belt-line service will be paid \$5 per day, 10 hours or less to constitute a day. All over 10 hours, 50 cents

per hour. Overtime to be computed on minute basis.

Engineers of single-crewed yard and belt-line engines will report for duty at the appointed time and will receive one-half hour's pay in addition to the regular day's pay for reporting 30 minutes in advance of the commencement of the day's work. In case of doublecrewed engines, if engineers do not relieve each other at the appointed time and the engineer of the next crew is required to prepare his engine, 30 minutes' pay will be allowed for same.

Beginning and ending of a day.—In all classes of road service an engineer's time will commence 30 minutes before leaving roundhouse or designated track and will conclude at the time the engine is placed

on the designated track or relieved by hostler at terminal.

Initial terminal delay.—When delayed within the terminal as much as one hour beyond the time set to leave, engineers will be paid one

hour's overtime at overtime rates, according to class of engine, 1 hour and 30 minutes to constitute 2 hours, etc. If road overtime is made

on same trip, initial overtime will be deducted.

Final terminal delay.—Final terminal delay will be paid for at the end of the trip when delayed more than 30 minutes between yard-limit boards governing yard to which train is to be delivered and the point of final relief, and to be paid for at the overtime rate, according to class of engine, on the minute basis.

Hours-of-service law—Amendment of section E of the application of the 16-hour law.—Engineers in train service tied up under the law will be paid continuous time from initial point to tie-up point. When they resume duty on a continuous trip they will be paid from the tie-up point to the next tie-up point or to the terminal on the basis of a minimum day. It is understood that this does not permit running engines through terminals or around other crews at terminals unless such practice is permitted under the pay schedule.

It is understood that existing rates of pay or better working conditions shall not be reduced by the rates or rules hereby agreed upon, nor shall general committees of adjustment be debarred from taking up with their respective managers matters not decided at this conference.

# THE ARBITRATION PROCEEDINGS.

The board constituted as hereinbefore described held its first meeting in New York City on Friday, July 12. At this meeting the board organized and elected Oscar S. Straus as chairman. It was agreed that the sessions should be held at the Oriental Hotel, Manhattan Beach, N. Y., beginning July 15. The hearings occupied the following days: July 15, 16, 17, 18, 19, 22, 23, 24, 25, 26, and 27. With the exception of one day, sessions were held both in the morning and afternoon. At these sessions the engineers were represented by Warren S. Stone and M. W. Cadle. The railroads were represented by William M. Duncan, B. A. Worthington, O. E. Butterfield, Francis I. Gowen, George F. Brownell, and T. M. Kirby. The hearings were opened by a general statement of the case for the engineers by

Mr. Stone and for the railroads by Mr. Worthington.

During the progress of the case 25 witnesses were called and examined and cross-examined on behalf of the engineers and 16 on behalf of the railroads. Over 80 exhibits were offered by the engineers, consisting of statements and statistical tables relating to wages, rates, accidents, etc.; copies of the prevailing wage schedules of engineers on certain western, southern, and eastern railways; blue prints and diagrams of locomotives; application blanks; books of questions and instructions for engineers and firemen; copies of rules governing railway employees; descriptive lists of signals; copies of time-tables and official bulletins with which engineers were required to be familiar, etc. On behalf of the railroads over 130 exhibits were submitted. These consisted of statistical tables, diagrams, and explanatory statements relating to the earnings and rates of pay of engineers and other railway employes; the estimated increases, both direct and collateral, in the pay rolls of the railroads that would result from granting the requests of the engineers; the financial status of the several roads involved; and their earnings and expenditures.

At the close of the testimony the case of the engineers was summed up by Mr. Stone and that of the railroads by Mr. Robbins and Mr. Duncan. Following this oral presentation briefs were submitted on behalf of the engineers by Mr. Stone and on behalf of the railroads

by Mr. Duncan and Mr. Worthington.

From the date of adjournment following the hearings to September 9, the members of the board spent much time in studying the evidence and statistics, in examining the arguments submitted, and in making independent investigations. On September 9, the board met to take up the question of findings. They were engaged in this work from September 9 to 14, inclusive. After tentative findings were made a report was drawn up and submitted to all the members for their revision. After such revision the board met again, on October 28, to consider this report as a whole for final action, and continued in session upon this work until November 2, inclusive, on which date it announced its award.

Some idea of the extent of the problem presented for the consideration of the board may be gathered from the fact that the 52 railroads concerned in the arbitration had (according to Exhibit 5 submitted by the railroads) 66,876 miles of main track, as compared with 266,185 for the United States as a whole, or 25.1 per cent of the total. Their operating revenues and operating expenses (amounting, respectively, to \$1,088,968,087 and \$726,994,658) were each nearly 40 per cent of the total for all railroads in the United States and their net operating revenue, \$361,973,429, was 39 per cent of the total for all the railroads of the country. These 52 railroads, according to the same authority, carried 47.3 per cent of the ton miles, and 42.8 per cent of the passenger miles of all the railroads of the United States. Their employees, excluding general officers, numbered 40.8 per cent of the total; and the aggregate compensation to employees, excluding general officers, constituted 41.5 per cent of the total for the United States. The number of engineers employed on the 52 railroads as reported by the railroads themselves in July, 1912 (railroad Exhibit 4), was 31,840. The aggregate compensation of the engineers in the employ of the 52 railroads during the fiscal year ending June 30, 1911, was reported by the railroads in their Exhibit 67A at \$41,874,282, or 43.1 per cent of the total engineers' wages for the United States.

### THE ARGUMENT AND TESTIMONY OF THE RAILROADS.

The railroads held that the engineers received not only fair but liberal compensation for work performed; that the hours of duty were so limited, and other conditions of service so arranged as to relieve the engineers in the normal course of their work of excessive strain; and that there had been no change requiring a readjustment in working conditions since the last wage adjustment. Briefly, their position may be summarized as follows:

1. Railroad employees were as well, if not better, paid than labor

in other employments.

2. Engineers constituted the highest paid class of employees in

the railroad service.

3. The 1910 adjustment of the engineers' wages was made subsequent to the adjustment with the conductors and trainmen, and

practically the same differential continued in favor of the engineers that had existed for a number of years. The existing differential between the engineers and other employees was as wide, if not wider, than was warranted by the character of the service, the responsibilities imposed, the risks assumed, or the actual labor required.

4. At the time the engineers' wages were increased, in 1910, full consideration was given to all the conditions of service then pre-

vailing.

5. Since that time there had been no increase in the physical labor, responsibility, or risk of the engineers, but, on the contrary, all had been reduced through labor-saving devices or safety appliances, relieving the engineers of duties formerly performed and of risks formerly incurred.

6. The services of the engineers were not of greater value to-day than in 1910, measured by any of the units suggested by any of the

parties.

7. The vitality and working period of the engineers compared

favorably with that of other wage earners.

8. The railroads were financially unable to pay increased wages. Succinctly stated, the railroads argued that the demands of the

engineers grouped themselves into three classes:

First, the question as to whether rates of pay and rules of service on the 52 railroads involved in the controversy should be standardized in accordance with the demands proposed by the engineers. The roads claimed that the engineers' organization meant by standardization, apparently, some flat basic rate; that they did not mean that every man on every road should receive a standard or a basic rate of pay; that they apparently desired a minimum wage fixed, and in fixing that minimum rate of pay had not taken into consideration any of the poor railroads, but had fixed it with reference to the larger railroads; that on the one hand, the engineers urged an alleged standardization theory, and on the other hand, they refused to adopt it where it would reduce their pay. The railroads asserted further that the rates of pay had been adjusted according to the relative value of the services that the men rendered. The engineers, it was argued, if they wished to readjust the lower wages should be willing also to readjust the higher rates.

The second objection made by the railroads to standardization was that any attempt to fix a flat basic rate of pay in eastern territory failed to take into consideration the fact that different services were necessarily being rendered by the employees on different railroads. The application of a basic rate to all these railroads, the railroads declared, without taking into consideration the nature of the service, would be not only unfair to the men, particularly to the men on some divisions, but would be absolutely unfair to the railroad companies,

and without justification.

The railroads stated that the recognition of the demand of the engineers for increase in rates of pay would increase the aggregate compensation paid to the engineers in eastern territory over \$7,500,000 and that the demand required the railroads to pay this much increase to the same number of engineers for precisely and identically the same service that those engineers have been rendering during the past two years. The railroads' position was that the demand was unjustified, because they claimed there was no foundation for it in additional

hardships that the engineers had to undergo, no justification for it when their wages were compared with the wages paid to other classes of employees either in the railroad service or elsewhere. It was claimed that the railroad exhibits showed that in 1902 there was a general advance in wages of railroad employees; in 1905 and 1906, another; in 1907 and 1908, another; and in 1910 and 1911, still another advance. From the records of the Interstate Commerce Commission, the railroads also submitted an exhibit purporting to show that engineers earned an average in 1900 of about \$1,180 a year; that in 1910, before the 1910 and 1911 advances, they had increased their average yearly compensation to thirteen hundred and some odd dollars, and after the wage increase of 1911 it averaged

about \$1,500 for all classes of engineers.

As to the proposals of the engineers for electric service, the railroads declared that the Brotherhood of Locomotive Engineers intended not only to man the motive power of the railroads, whether it was steam, gasoline, or electricity, but that they aimed to do it at the same rates which prevailed in steam service. This would be a great injustice to the public to require the public on the Long Island Railroad, for instance, the railroads stated, to pay steam rates of pay, if there were men who were willing and who wanted to take the service at a less rate. The railroads regarded the proposals as a "closed shop proposition," and expressed the opinion that the board of arbitration should hesitate to adopt any such principle. They declared that the board could very consistently take the position that inasmuch as the railroad companies had furnished a new instrumentality which would produce greater results, that a different rate of pay should apply, or at least a different amount of service should be given for the same rate of pay even if the board should conclude that the railroads should be limited in the selection of men for this service to the Brotherhood of Locomotive Engineers.

As a general conclusion, the railroads stated that in their judgment engineers were fully and amply paid, but that even if this was not true it was a question whether the railroad companies had any funds with which to make a greater distribution to these employees.

## ARGUMENT AND TESTIMONY OF THE LOCOMOTIVE ENGINEERS.

The engineers requested certain uniform rules and rates of pay, the application of which would mean varying advances in compensation. The engineers asked that these proposed rates and rules be put into effect regardless of—

1. The financial ability of the railroads to pay more wages.

2. The variations in the service on different railroads and on different divisions of the same railroad.

Of the arguments presented in favor of the engineers' claims, the

following were the most important:

1. The nature of the calling, which involves (a) heavy and increasing responsibility; (b) skill and efficiency, as indicated by length and severity of apprenticeship required; (c) acute mental strain incident to the operation of certain classes of trains; (d) an unusual degree of hazard; (e) relatively limited period of earning power, fixed by age limitations and by numerous efficiency requirements.

2. Increasing productivity of the engineers' services.

3. The wages of engineers had not kept pace with the wages of

other classes of employees in train service.

4. That the existing rates of pay in the southern and western districts were higher and the rules of service better than in the eastern district.

5. In the southern and western districts the rates of pay and rules of service were standardized to a much greater extent than in the eastern district. In the eastern district the conductors and other trainmen receive a standard wage on all railroads, and the same prin-

ciple should apply to the engineers.

The engineers claimed to have shown by the testimony of their witnesses the years of training necessary to fit themselves for the position of engineer, of the many examinations they were required to pass, of the physical tests imposed, of the type of efficiency demanded, of the hours they gave of their time for which they received no compensation. These witnesses had, it was pointed out, been brought from the different classes of service, and this testimony proved, it was claimed, that the rates of pay requested were just and equitable and were prepared after careful consideration by the representatives of the employees from the railroads involved. The wages they were asking, the engineers contended, were now being paid in other territories where traffic was not so congested and where the railroads were not able to earn the same revenue as in the East. For example, it was stated that the freight engineer on some railroads in the southeastern territory received \$5:40 for 8 hours' work, and if he were to work 10 hours he would earn far more than the engineers were asking for the freight engineer in eastern territory. They contended that there was not exactly a standard wage in effect in the West, but there was only a few cents difference, and that the going wage for a similar type of engine was much higher than in the East. mission was made of the fact that there was a slight difference in the freight rates between the West and the East, but the men stated that it was also true that engineers handled a heavier tonnage in the East than they did in the West.

The engineers claimed further that the working conditions they were requesting were nothing new, but were in existence and had been established in both the southern and western territories and were paid to-day on many of the trunk lines. Especially, the engineers declared, was this true in the case of final terminal delay.

As to the electric service, the engineers inquired whether it was more unfair or unjust for them to ask that an engineer be placed on the electric service than it was for the railroads, who had already recognized the principle, to put a passenger conductor in charge, even though it be only one trolley car, at the standard wage? The employees stated that they did not want an employee, even though it be with a single interurban car, out on the steam tracks, who did not know the rights he had on the road, who knew nothing about railroading or high speed, who, as a matter of fact, knew nothing about getting over the road and depended wholly upon the conductor.

The high range of earnings shown for a small proportion of engineers was declared to be the result of unusual conditions, a congestion of business, perhaps a number of men sick, and every man working up to the limit of human endurance. Although the railroad exhibits showed some high earnings during a specified month, a com-

parison each way of three months from this high month would give, the employees claimed, a better insight into actual earnings of in-

dividual engineers.

In answer to the statements and arguments of the railroads as to standardization, and as to separate rates of pay for men on the water and the mountain grades, the engineers stated that in the case of the Pennsylvania Railroad, to which reference was made by the railroads in their presentation of the case, no more per mile for passengers or freight was received over the mountain divisions than was obtained by other roads over the water grade: that the Pennsylvania Railroad absolutely refused to pay the engineers on that particular division a higher rate than was paid elsewhere, but that they were forced to accept the basic rate of the New York Central, the \$4.85, and the same rate was paid all the way through, regardless of the grade or the physical geography of the country. There was no distinction made, the engineers declared, because one railroad was fortunate enough to get a water-level line and the other railroad perhaps went over the mountains: the charge was the same for all and the same rate was paid for engineers. Their requests, the engineers claimed, involved classifications of service, such as freight and passenger service, and subclassifications based on the size of the engines, or, in other words, the engineers stated that their request meant that one railroad should pay the same as another railroad for each class of service and each class of engine.

As to the earnings of engineers, even though the showing of railroads was correct as to \$1,500 as an average for the year, or \$125 per month, the employees claimed that at best the engineer only had a working life of 12 years, and during this restricted period could not lay aside a competence which would take care of his wife and children

after he was no longer a wage earner.

## THE REPORT OF THE BOARD OF ARBITRATORS.

In its report the board of arbitration discussed the theoretical aspects of the railway wage problem and submitted some constructive recommendations. These points, however, do not fall within the scope of the present study. In the general discussion of its award the board stated that it recognized the heavy responsibility of engineers—greater than that of any other class of employees in train service—the skill and efficiency required, the mental strain to which the men were subjected, the hazard of the calling, and accepted these points brought forward by the engineers at their full value. They agreed that the compensation of the engineers should be adequate to cover their recognized responsibility, skill, and efficiency, and the mental strain to which they were subjected.

As to standardization, the board held that the requests of the engineers involved standardization as a fundamental principle, and stated that the facts available showed that the claims of the engineers for introducing uniformity into the eastern district were not fully confirmed. They pointed out that uniformity did not exist in the southern and western districts and, therefore, the experience of no section of the country could be adduced in favor of granting fully

the uniformity asked for by the engineers.

The board stated that it could find no adequate reason why there should be complicated differences in the rates of compensation for services so nearly alike as slow freight service and certain other classes of freight service, with the exception that the additional work involved in local freight service appeared to justify a somewhat higher rate. In their award the board, therefore, had simplified the classification of rates of pay by granting the same rates for several different kinds of freight service. They grouped into one class, so far as compensation was concerned, through freight, work, wreck, pusher and helper, mine run or roustabout, and circus trains, and part of the milk-train service.

The board stated that they could find no reason why the rules of service that applied to men held away from their home terminal or tied up under the 16-hour law should not be the same on different

roads.

When it came to the important question, however, of deciding that the rate of compensation should be the same for a particular kind of service without respect to road or division, the board declared it could find no warrant for imposing such a regulation. They stated that in no part of the country could it be said that all railroads without respect to territory or traffic were paying precisely the same rate of compensation for the same class of service. In the western district the pay was generally higher for the mountainous country than on the plains. Running a locomotive upon a railroad which had very light traffic was less exacting and required less constant alertness than on roads having heavy traffic. These facts led the board, it stated, to hold that local variations in the character of the service should be reflected to a reasonable extent in the rates

of pay

Relative to intercorporate relationships, the board stated that while there were listed in the arbitration 52 separately named roads, a large number were controlled by a comparatively small number of systems. Large railroad corporations controlled lines aggregating 39,050 miles, or 79 per cent of the 49,286 miles concerned in the controversy. In addition to the intercorporate relationships as determined by stock ownership, lease, capital advanced, and voting trusts, the board also found there was a system of interlocking directorates, and as illustrating the extent of these interlocking directorships, pointed out that 14 individuals held 67 directorships in 27 different railroads in the eastern district. It was, therefore, clear, the board stated, that from the point of view of the present arbitration, "systems" should be considered rather than the individual elements of the system, for their relations and business were so interwoven that even if a unit of the system considered by itself is unprofitable, taken in connection with the whole system it might be profitable, since it may be a valuable feeder to a large railroad and furnish business which had a long haul over such a system.

The board also stated that the courts had declared in various cases, in administering the receivership of railroads, that the public safety was the paramount consideration, and that a railroad's financial embarrassments not only did not warrant reducing the pay of employees below what was paid before the receivership, but had ordered the receivers to pay the "going" rate of wages for the different classes

of employees.

If the railroads were unable to pay fair and reasonable compensation in accordance with the award of the board, the board stated that such railroads would have just cause to open the question of an

increase of rates with the Interstate Commerce Commission.

The board held that in view of all the facts presented with regard to the compensation of engineers, many of the rates in existence gave reasonable compensation for the service performed and that the differences in the average daily compensation of engineers in the East on the one hand and in the South and West upon the other hand, as given by the Interstate Commerce Commission figures, was not great. Holding to the principle that available information, rather than a theory, must largely control their decision, the board reached the conclusion that a case had not been made for an advance all along the line in the compensation of the engineers. On the other hand, the statement was made that the evidence presented showed that for some railroads and for certain classes of service on other railroads the compensation was too small, and the board had therefore taken into account the question of the minimum wage which should be paid in the territory concerned. It was believed by the board that the principle of a minimum was sound. In the opinion of the board it was desirable that all of the factors which entered into the nature of the service should be taken into account, and that the more arduous and difficult service should have the greater compensation. With this point in view the board stated that it felt that at this time they had gone as far toward establishing uniformity of rates of pay as was practicable by introducing a minimum wage for each of the more important classes of service.

The award and report was agreed to by the five members of the board appointed by the Chief Justice of the United States, the presiding judge of the Commerce Court, and the Commissioner of Labor. It was signed by Mr. Willard with an explanatory statement. Mr.

Morrissey filed a dissenting opinion.

The detailed award of the board as compared with the requests of the engineers follows.

#### REQUESTS OF ENGINEERS.

Passenger service.—One hundred miles or less, engines of 20-inch cylinders or less, \$4.40. Engines over 20-inch cylinders or less. \$4.60. Additional miles pro rata. Overtime to be computed on a basis of 20 miles an hour and to be paid for at 70 cents an hour.

Electric service.—Wherever electric service is installed or now in operation, engineers will take the positions of motormen under the same rates and conditions as obtain in steam service in the territory where electric service is operated.

#### AWARD OF ARBITRATION BOARD.

Passenger service.—Minimum rate for passenger engineers to be \$4.25 for 100 miles or less. Additional miles pro rata. Overtime to be computed on a basis of 20 miles an hour and to be paid for at 50 cents an hour. This award to be without prejudice to existing rates on different classes of engines.

Electric service.—Wherever electric service is installed as a substitute for steam, or is now in operation, locomotive engineers will have the preference for the position of motormen, this preference, however, not to work to the detriment of men employed as motormen at the time of the award.

Owing to the complexity of the situation, the board found itself unwilling to draw up rules regulating rates of pay and working conditions, but awarded the minimum passenger day's rate of pay of Freight service.—One hundred miles or less, 10 hours or less to constitute a day's work. Rates for which to be as follows: Engines with 20-inch cylinders or less, \$5.25. Engines with cylinders over 20 inches but less than 24 inches in diameter, \$5.50. Engines with 24-inch cylinders or over, with exception of Mallets, \$5.75. Mallet type of engine, \$7. Miles in excess of 100 miles to be com-

Miles in excess of 100 miles to be computed on a basis of 10 miles an hour and to be paid for pro rata, and to be paid for

on a minute basis.

Through freight rates to be paid to mine runs, work train, wreck, pusher and helper, milk trains, and roustabout services.

Engineers to be paid overtime for hours in excess of 15 held away from their home

terminal.

Local freight service to be paid 25 cents more than through freight service,

according to classes of engines.

Switching service.—Ten hours or less to constitute a day's work; overtime over 10 hours to be computed pro rata and to be computed on a minute basis. Rates of engines, \$4.50 per day.

Belt-line service.—Ten hours or less to constitute a day's work; overtime to be computed pro rata and paid on a minute basis; \$5 a day to be the rate of pay.

Engineers of single-crewed yards or belt-line service engineers will report at appointed time and will be given 30 minutes additional pay for reporting 30 minutes in advance of the regular time. In double-crewed yards, if engineers do not relieve each other at the appointed time, and the engineer of the next crew is required to prepare his engine, 30 minutes will be allowed for same.

Beginning and end of day.—In all classes of service day to begin 30 minutes before leaving roundhouse or designated track, and to end when engine is placed on designated track or relieved by hostler

at terminal.

Initial terminal delay.—When delayed more than one hour beyond time set to leave, engineers will be paid overtime according to engine and class of service.

according to engine and class of service.

If road overtime is paid on same trip, initial overtime will be deducted.

Final terminal delay.—Final terminal delay will be paid for according to class of engine on minute basis when engineer

\$4.25, the rules of service, however, to be the same as now obtain in the electric service.

Freight service.—The minimum rate for freight engineers shall be \$4.75 for 10 hours or less, or 100 miles or less. Overtime to be computed on a basis of 10 miles an hour and paid for pro rata on a minute basis.

Awarded without change.

Engineers held away from home terminal 28 hours or longer are to be paid 10 hours for the first 28 hours so held, and 10 hours for each 24 hours thereafter, provided the engineers are not held by law or through an act of Providence.

Awarded without change.

Switching service.—Ten hours or less to constitute a day's work; overtime to be computed pro rata and paid on a minute basis; time to begin when required to report for duty and to end when engine is placed on designated track or engineer is relieved at terminal.

The minimum day's rate in switching

service to be \$4.10.

Belt-line service.—The board realizes that belt-line and transfer service is different from ordinary switching service and may, therefore, require a higher rate; owing to the wide differences of conditions the board was unable to decide what would be a fair rate of pay for this service; the board, therefore, referred this question back to the management of the railroads and to the men for adjustment.

Beginning and end of day.—In all classes of service a day will begin when an engineer is required to report for duty and end when engine is placed on a designated track or delivered to hostler at terminal.

Initial terminal delay.—Request denied.

Final terminal delay.—Final terminal delay will be paid after the lapse of one hour at the overtime rate, according to

is delayed more than 30 minutes between yard-limit bounds governing yard to which train is to be delivered.

Hours-of-service law.—Engineers shall be paid continuous time to tie-up point; when work is resumed, to be paid continuous time to next tie-up point, or minimum day to terminal. Running through terminals or around other crews prohibited unless already in schedules.

Safety clause.—Existing rates of pay or better working conditions shall not be reduced by the rates or rules hereby agreed upon: nor shall general committees of adjustment be debarred from taking up with their respective managers matters not decided at this conference.

Date of effectiveness.—In articles of agreement for arbitration it was stated that the board should fix the date of its award and might make it retroactive if it

should think it necessary.

class of engine, on the minute basis. If road overtime has commenced, terminal overtime will not apply and road overtime will continue to the point of relief.

Method of ascertaining final terminal delay.—In passenger service; from the time the train reaches the terminal station.

In freight service; when train reaches designated main track switch connecting

with terminal yard.

Hours-of-service law.—Engineers to be paid continuous time from initial to tie-up point. On resuming duty they shall be paid. 50 miles or less. 50 miles pay: 50 to 100 miles, or 5 to 10 hours, 100 miles pay: over 100 miles or 10 hours, schedule rates. Running through terminals or around other crews prohibited unless already in schedules.

Safety clause .- Awarded.

Date of effectiveness.—Award shall be effective as of May 1, 1912, except. "Held away from home terminal." and "Final terminal delay." which are to take effect November 1, 1912.

# COMPARISON OF SCHEDULES IN EFFECT BEFORE AND AFTER THE AWARD OF THE ARBITRATION BOARD.

As further illustrating the effect of the application of the award of the arbitration board, a comparison, so far as it was possible, was made from the printed or typewritten official schedules of rates of pay and working rules in effect on the different railroads prior and subsequent to the award of the arbitration board. The comparison of rates was made on a day, hour, mileage, or trip basis according to the standard of comparison afforded by the schedules of the individual railroads. In the case of some companies no comparison was possible because of the change made in the basis of wage payments as the result of the arbitration proceedings. It will be noted that the increases in rates of pay shown in the following series of tables are practically the same as those first set out in the comparison, according to the Interstate Commerce Commission's classification of locomotives.

The detailed comparison by railroads, arranged in alphabetical order, is given below. In the case of each railroad a detailed basic comparison is made, followed by derivative tables which show the amount and per cent of increase in rates of pay according to principal

branches of service.

#### BALTIMORE & OHIO RAILROAD CO.

By referring to the following table it will be seen that the award of the arbitration board gave increases in rates of pay to the locomotive engineers in only two instances: (1) An advance of three-

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tenths of a cent a mile, or 6.7 per cent, on unclassified engines, and (2) an increase to yard engineers outside of the Pittsburgh district of 1 cent an hour, amounting to an advance of 2.5 per cent over rates in force before the arbitration. In all other branches of service the rates of pay were unchanged by the arbitration board.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration effective May 1, 1912.

Class of service.	Rates per—	Pay.		Increase.	
Class of Set vice.	nates per—	1911	1913	Amount.	Per cent.
Passenger service: Average rate, specified runs Freight service:	Trip	\$1.875	\$1.875	\$0.00	0.0
Engines weighing 274,000 pounds and over Engines weighing over 173,000 pounds and less than	Mile	.05	.05	.00	0.0
274,000 pounds. Other engines. Connellsyille and Glenwood, round trip:	do	.0485 .0445	.0485 .0475	.00	0.0 6.7
Engines weighing 274,000 pounds and over	Trip	5.50	5.50	.00	0.0
Engines weighing over 173,000 pounds and less than 274,000 pounds.	do	5.30	5.30	.00	0.0
Engines weighing 140,000 pounds to and including engines weighing 173,000 pounds.  Helper service:	do	5.15	5.15	.00	0.0
Average rate, specified runs— Mallet Other than Mallet	do	1.58 1.37	1.58 1.37	.00	0.0
Yard service: Chicago, Pittsburgh district; Youngstown district and New Castle. Other yards.	Hour	.415	.415	.00	0.0 2.5

## Rates of pay of locomotive engineers.

0.1	0 0				•	
Possennes					Rate p	er trip.
Passenger	service.	,'			1911	1913
Specified runs: Philadelphia and Wilmington, round to Baltimore and Washington. Washington and Boyd. Washington and Gaithersburg, round to Overtime (on basis of 20 miles per hour). Minimum passenger rate (per 100 miles or least	rip				1.80 1.25 1.90 .45	\$2.55 1.80 1.25 1.90 .50
Freight service.		weighing pounds er.	over pounds	weighing 173,000 s and less 274,000	140,000 and inc	weighing pounds to cluding enveighing pounds.
	1911	1913	1911	1913	1911	1913
Specified runs, Connellsville and Glenwood, round trip (overtime after 11 hours)	\$5. 50	\$5. 50	\$5.30	\$5.30	<b>\$</b> 5. 15	\$5.15

<sup>1</sup> Miles in excess of 100 pro rata.

## Rates of pay of locomotive engineers—Continued.

FREIGHT SERVICE.				per m	ile. 10 h	Overtime after 10 hours and 30 minutes.	
			1911	19	13 1911	1913	
Mallet engines (2401–2420 class). Other Mallets. Engines weighing 274,000 pounds and over. Engines weighing over 173,000 pounds and less than 274,000 Other engines.	) poun	ds	\$0.05	5 .0	54	54 . 50 5 . 485	
			oer trip	than	Overtin	ne after—	
HELPER SERVICE.	Mallet.		Mallet.			1	
	1911	1913	1911	1913	1911	1913	
Specified runs: Rowelsburg and Tunnelton or Blaser, round trip. Rowelsburg and Tunnelton, round trip. Newburg and Tunnelton, round trip. Newburg and Blaser, round trip. Newburg and West End, round trip. Hardman and West End, round trip. Hardman and Tunnelton, round trip. Hardman and Tunnelton, round trip. Rowelsburg and Newburg, one way. Piedmont and Altamont, round trip (½ day). Hyndman and Sand Patch, round trip (½ day).	2.00 1.50 1.55 1.50 1.50 1.55 1.50	2.00 1.50 1.55 1.50 1.50 1.55 1.50	\$1. 10 1. 65 1. 25 1. 45 1. 25 1. 40 1. 45 1. 40 2. 45 2. 45	\$1. 10 1. 65 1. 25 1. 45 1. 25 1. 40 1. 45 1. 40	H. m. 3 00 4 00 3 00 3 00 3 00 3 00 3 00 3 00	H. m. 2 30 3 20 2 30 2 30 2 30 2 30 2 30 2 30	

#### BALTIMORE & OHIO SOUTHWESTERN RAILROAD CO.

As in the case of the Baltimore & Ohio Railroad, the schedules of this company, as can be seen from the table below, showed an advance of 6.7 per cent in rates of pay to unclassified engineers in throughfreight service and 2.5 per cent in yard service outside of East St. Louis and Cincinnati as the result of the decision of the arbitration board. Unusually large increases, ranging from 50 to 52.6 per cent' were allowed by the board in local freight service.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

				Increase.	
Class of service.	Rate per—	1911	1913	Amount.	Per cent.
Specified runs: Loveland commuter trains Flora and Vincennes. St. Louis and East St. Louis via Merchants or Eads Bridge. Freight service:	Trip Round trip. Trip	\$4.50 5.00 .30	\$4.50 5.00 .30	\$0.00 .00 .00	0.0 .0 .0
Engines weighing 274,000 pounds and over Engines weighing over 173,000 pounds and less than 274,000 pounds.	Miledo	.05	.05	.00	.0
All other engines	do	. 0445	. 0445	. 000	.0
Local freight: Engines weighing 274,000 pounds and over. Engines weighing over 173,000 pounds and less than 274,000 pounds.	do	. 0485	.075	. 025 . 0250	50.0 51.5
Other engines	do	.0475	. 0725	. 0250	52.6
East St. Louis and Cincinnati Other yards			. 415 . 41	.00	. 0 2. 5

Rates of pay of locomotive engineers.

Class of service.	Rate per—	1911	1913	Basis of d	Basis of day's work.		time lour.
	Por			1911	1913	1911	1913
Specified runs:							
Loveland commuter trains.		<b>\$</b> 4.50	\$4.50			4	
Flora and Vincennes,		5.00	5.00				
round trip. St. Louis and East St. Louis via Mer-		. 30	. 30				
chants' or Eads Bridge.							
Freight service: 1 Mallet engines (2401–2420).	Mile	 	.06		10 hours on loan		
Other Mallets	do		. 05		dodo		. 54
Engines weighing 274,000 pounds and	do	. 05	. 05	100 miles or less; 10 hours or less.	do	\$0.50	. 50
over. Engines weighing over 173,000 pounds and less than 274,000	do	.0485	. 0485	do	do	. 485	. 485
pounds. All other engines Passenger service: 2	do	.0445	.0475	do	do	. 445	. 475
Minimum rate	Day		4.25	do	do	. 45	. 50
Local freight: Mallet (2401-2420 class)	Į.	1	.085	do	do		. 85
Other Mallets	do		.079	do	dodo		. 79
Engines weighing 274,000 pounds and	do	. 95	.075	do	do	. 50	. 75
over. Engines weighing over 173,000 pounds and less than 274,000	do	. 0485	. 0735	do	do	. 485	. 735
pounds. Other engines	do	. 0475	. 0725	do	do	. 475	. 725
Yard service: 3				*			
East St. Louis and Cincinnati yards.	Hour	. 415	. 415	10 hours or less	10 hours or less	. 415	. 415
Other yards	do	. 40	. 41	do	do	. 40	. 41
Belt or transfer service:	70				3.		477
Minimum rate	Day		4.75		ao		. 475

Overtime paid on the basis of 10 miles per hour, pro rata, not to begin until after 10 hours and 30 ninutes.

#### BOSTON & ALBANY RAILROAD.

On short passenger runs in one direction the rates of pay to engineers on the Boston & Albany Railroad were 3.2 per cent higher after the award of the arbitration board. In all other passenger service the minimum rates were advanced 1.7 per cent. In local freight service the rates were increased slightly more than 5 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

	Rate pe	er day.	Increase.	
Class of service.	1910	1913	Amount.	Per cent.
Passenger service, runs of 95 miles in one direction	\$4.18 4.12	\$4.25 4.25	\$0.07 .13	1.7
Freight service:1 Class G6, G5, G33, G34, F2 engines. Local freight:	4.85	4.85	.00	0.0
Class G6, G5, G33, G34, F2 engines	4.85	5.10	. 25	5.2
All other engines (except 4-wheel, connected 1910) Local freight:	4.75	4.75	.00	0.0
All other engines (except 4-wheel, connected 1910). Switching service.	4.75 4.11	5.00 4.11	. 25	5.3 0.0

<sup>&</sup>lt;sup>1</sup>Includes helpers, gravel work trains, 1910; work, wreck, pusher or helper, mine runs or roustabout, circus trains, and milk trains, in 1913.

Overtime on the basis of 20 miles per hour after 10 hours and 30 minutes.
 At following yards, when engines required to help trains, 25 cents additional to yard rates paid, effective from June 1, 1913: Chillicothe, North Vernon, Washington, and Vincennes.

Class of service.		P	ay.	Basis of day's	Overtime per hour.	
	per	1910	1913	work, 1910–1913.	1910	1913
Passenger service, runs of 95 miles in one direction.  Mileage in excess of 100 miles.			\$4. 25 . 04 <b>2</b> 5	100 miles or less.	\$0.412	\$0.50
All other passenger runs, minimum pay Freight service, <sup>12</sup> Classes G-6, G-5, G-33,	do	4.18	4. 25	100 miles or lessdodo.		. 50
G-34, F-2 engines. Local freight. All other engines (except 4-wheel connected, 1910)	do	4, 75	5. 10	100 miles or less.	.475	. 475
Local freight 4-wheel connected engine. Mallet-type engine. Switching service	do	4.65	5. 00 5. 85 4. 11	100 miles or less.		585

<sup>&</sup>lt;sup>1</sup> Includes helpers, gravel-wor's trains, 1910; work, wreck, pusher or helper, mine runs or roustabout, circus trains and mil. trains in 1913.

<sup>2</sup> 25 cents per 100 miles or less added for local freight service in 1913, according to class of engine. Miles

over 100 pro rata.

## BUFFALO, ROCHESTER & PITTSBURGH RAILWAY.

The award of the arbitration board when compared with the preexisting rates to locomotive engineers on the Buffalo, Rochester & Pittsburgh Railway Co. showed the following advances:

Passenger service	25 cents a day.
Local freight and switching service.	10 cents a day.
Pusher or helper service	15 to 27 cents per run.

The rates of pay in through freight, and in mine run, circus, and roustabout service were no higher after the award of the board.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration effective May 1, 1912.

Class of service.	Rate	Pay.		Increase.	
Class of service.	per	1910	1913	Amount.	Per cent.
Passenger Through freight Local breight Switching Pusher or helper. A verage rate, specified runs, MF ado. Average rate, specified runs, Decapod. Work, wrec', pusher, or helper; mine run or roustabout; circus trains	do do Trip	\$4.00 4.75 4.90 4.00 4.75 3.14 3.17	\$4. 25 4. 75 5. 00 4. 10 4. 75 3. 29 3. 44 4. 75	\$0. 25 .00 .10 .10 .00 .15 .27	6.3 .9 . 2.5 2.5 .0 4.8 8.5

Class of service.	Rate	per day.	Basis of day's work.		Over	time.
	1910	1913	1910	1913	1910	1913
Passenger service Through freight service. Local freight serv-		\$4. 25 1 4. 75 2 5. 00	100 miles or less		\$0.40 per hour Pro ratado	\$0.50 per hour. Pro rata.
ice. Switching service		<sup>3</sup> 4. 10		(4)	do.'	Do.

		1913			
Class of service.	1910	X, V, or smaller engine.	Mikado.	Decapod.	
Pusher or helper service. Specified runs, pusher or helper service: Buffalo to Hoyts and return. Buffalo to Springville and return. Buffalo to East Concord and return. Buffalo to Beaver and return. Buffalo to Ashford and return. Bradford or Howard to Bingham and return. Clarion Junction to Freeman and return. Decapod engine. Clarion Junction to J. and B. Junction and return. Decapod engine.	3. 60 3. 60 4. 00 4. 25 1. 50 2. 00 2. 20 2. 40	1 \$4.75 3.60 3.60 3.60 4.00 4.28 1.50 2.00	\$3. 78 3. 78 3. 78 4. 20 4. 49 1. 58 2. 20 2. 64	\$3.96 3.96 3.96 4.40 4.71 1.65	

- On Mikado or Decapod engines the rate is fixed at \$5 per day.
   On Mikado or Decapod engines the rate is fixed at \$5.25 per day.
   On Mikado or Decapod engines the rate is fixed at \$4.51 per day.
- 4 10 hours or less.

Work, wreck, pusher, or helper; mine run or roustabout, circus trains, rates per day:	
1910	\$4,75
1913	

#### DAYTON & UNION RAILROAD CO.

On the Dayton & Union Railroad the rates in passenger service on the basis of 100 miles, were \$1.25, or 41.7 per cent higher after the award of the arbitration board. In freight service rates of pay were advanced 70 cents a day, or 16.3 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of service.	Rate per before t and aft	100 miles the award er.	Increase.		
	Before.	After.	Amount.	Per cent.	
Passenger Freight (local)	\$3.00 4.30	\$4.25 5.00	\$1.25 .70	41.7 16.3	

Class of service.	Rate per before the after.	100 miles award and
	Before.	After.
Passenger Freight (local)	\$3.00 4.30	\$4.25 5.00

NOTE.—No formal agreement or schedule of wages is in effect. Conditions of employment are governed by the award with the exception that the passenger trainmen waived their overtime in lieu of the company permitting their runs to remain the same as before the award.

#### DELAWARE & HUDSON CO.

On this railroad the rates of pay to passenger engineers were increased 35 cents a day, or 9 per cent, by the award of the arbitration board. Through freight rates were advanced from 5 to 50 cents a day. In milk-train service an increase of 25 cents a day was allowed for consolidation type of engines, and 75 cents a day for other classes. The rate of pay for Mallet engines when used in local freight service was made \$2 a day, or 42.1 per cent greater by the award. Engineers in local freight service had their rates of pay increased 25 and 35 cents a day. In switching service an advance to engineers of 10 cents a day was allowed by the arbitration board.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

	Rate pe	r day.	Incr	ease.	
Class of service.	1910	1914	Amount.	Per ce nt.	
Passenger Through freight: 1 Class of engine—	\$3.90	<b>\$4</b> .25	\$0.35	9.0	
Mallet Class E5 Consolidation D3, D3-A, D3-B	6.50 4.80 4.65 4.50	6.50 4.85 4.75 4.75	.00 .05 .10 .25	0.0 1.0 2.2 5.6	
Other engines	4.25	4.75	.50	11.8	
Other engines Local freight: <sup>2</sup> Class of engine—	4.00	4.75	.75	18.8	
Mallet Class E5 All others Switching	4.75 4.75 4.75 4.00	6.75 5.10 5.00 4.10	2.00 .35 .25 .10	42.1 7.4 5.3 2.5	

<sup>&</sup>lt;sup>1</sup> Through freight rates apply to work trains, 1910, and to work, wreck, pusher or helper, mine runs, transfer and circus train in 1914.

<sup>2</sup> Mine runs and Wilkes-Barre transfer runs, 1910, classed as road runs and paid as per class of engine run.

Class of service.	Rate p	er day.	Basis of day's work. Overtime, per hour.		Overtime, per mile.		
	1910 1914 1910 and 1914		1910	1914	1910	1914	
Passenger. Through freight: Class of engine—	\$3.90	\$4.25	100 miles or less	\$0.39	\$0.50	\$0.039	\$0.0425
Mallet	6.50	6.50	100 miles or less, 10 hours or less.	. 65	. 65	. 065	. 065
Class E5. Consolidation. D3, D3A, D3B Other engines.	4.80 4.65 4.50 4.25	4.85 4.75 4.75 4.75	dododododo	.48 .465 .450	.485 .475 .475 .475	.048 .0465 .045 .0425	.0485 .0475 .0475 .0475
Milk train: Class of engine—							
Consolidation Other engines Local freight: <sup>3</sup>	4.50 4.00	4.75 (2)	do	.45	.475 (2)	.045	.0475 (2)
Class of engine— Mallet Class E5 All others. Switching. Mixed train service 4.	4.75 4.75 4.75 4.00	5.10	do	.475 .475 .475 .40	. 675 . 51 . 50 . 41	.0475 .0475 .0475	.0675 .051 .05

<sup>1</sup> Through freight rates apply to work trains, 1910, and to work, wreck, pusher or helper, mine runs, transfer, and circus trains in 1914.

2 Through freight rates apply.

3 Mine runs and Wilkes-Barre transfer runs, 1910, classed as road runs and paid as per class of engine run.

4 Paid at freight-train rates, according to class of engine used and service.

## DELAWARE, LACKAWANNA & WESTERN RAILROAD CO.

Passenger engineers on this railroad, as can be seen from the following table, had their rates of pay advanced by the award of the arbitration board 15 and 25 cents a day in regular service, according to classes of engines, and 5 cents a day in suburban service. The increases in rates of pay per day in other branches of service granted by the arbitration board were as follows:

Through freight service, 25 cents a day (certain classes of engines

only).

Work, wreck, and roustabout, 15 and 25 cents a day.

Switching service, 10 cents a day (certain classes of engines only). Local freight service, 15 and 25 cents a day.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

	Rate p	er day.	Increase.		
Class of service.	1910	1913	Amount.	Per cent.	
Passenger:			•		
100 class engines	\$4.10	\$4.25	\$0.15	3.7	
Other engines	4.00	4.25	. 25	6.3	
Suburban service	4. 20	4.25	. 05	1.2	
Through freight:	i				
300, 700, and 800 class engines	4.80	4.80	.00	.0	
All other engines 1	4.50	4.75	. 25	5. 6	
Roustabout, work, and wreck:		4 00			
300, 700, and 800 class engines	4.65	4.80	. 15	3.2	
All other engines 2	4.50	4.75	. 25	6.3	
Switching:		4 = 0	0.0		
151 and 184 class engines	4.50	4.50	.00	.0	
All other engines	4.00	4.10	. 10	2.5	
Local freight:	4 00	- 0-	3.5	0.1	
300, 700, and 800 class engines	4.90	5.05	. 15	3.1	
All other engines 2	4. 75	5.00	.25	5.3	

Not including 385 and 1200 class engines, 1913, and new 500 class engines, 1910.
 Not including 385, 1150, and 1200 class engines, 1913, and 151, 169, 184, and 500 class engines, 1910.

Class of service.		e per	Basis of a day's	work.	Over per h	
C1855 01 501 (100)	1910	1913	1910	1913	1910	1913
Passenger:						
100 class engines	\$4.10	\$4.25	100 miles or less, 10 hours or less.	100 miles or	\$0.41	\$0.50
Other engines	4.00 4.20	4. 25 4. 25	dodo	do	. 40 . 42	. 50
Through freight: 1150 class engines		4.80	do	10 hours or less, 100 miles or		.48
300, 700, and 800 class engines	4, 80	4.80	do	less.	. 48	. 48
385 and 1200 class engines		4.95	do	do	405	. 495
New 500-class engines	4.65 4.50	4.75	dodo	do	. 465	.475
Roustabout, work, and wreck:	4 05	4.80	da	a.	40-	400
300, 700, and 800 class engines 385 and 1200 class engines	4.65	4.80	do	do	. 465	. 480
1150 class engines		4. SO	do	do		. 480
All other engines	4. £0 4. 65	4. 75	dodo	do	. 45	. 475
151 and 184 class engines	4.50	4.50	10 hours or less	10 hours or less.	. 45	. 45
All other engines	4.00	4.10	do		. 40	. 41
300, 700, and 800 class engines	4.90	5. 05	10 hours or less, 100 miles or less.	10 hours or less, 100 miles or	. 49	. 505
385 and 1200 class engines		5. 20	do	less do		.52
1150 class engines			do	do	. 465	.505
All other engines	4. 75		do	do	. 475	.50

For minimum day's pay of \$4.25.

# GRAND RAPIDS & INDIANA RAILWAY CO., NORTHERN AND SOUTHERN DIVISIONS.

As a result of the award of the arbitration board, passenger engineers on this railway secured increases in rates of pay from 4.4 to 6.3 per cent. In local freight service there was an increase of 11 cents a day to engineers, amounting to an advance of 2.2 per cent, while the rates of yard engineers were increased 3.8 per cent. Engineers engaged in through freight service were not granted any higher rates by the award.

On the southern division of the same railway the increases in rates of pay obtained as a result of the arbitration were practically the same as on the northern division. The table showing the comparison of rates before and after arbitration on the northern division follows.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

#### SOUTHERN DIVISION.

Class of service.	Data was	P	ay.	Incr	ease.
Class of set vice.	Rate per—	1911	1913	Amount.	Per cent.
Passenger: Average rate for specified trips	Day Mile. Hour	. 04	\$4.70 .0425 5.95 .05 .41	\$0.20 .0025 .00 .00 .015	4.4 6.3 .0 .0 3.8

#### NORTHERN DIVISION.

	ſ	ſ	1		
Passenger: Average rate for specified trips	Day	\$6.31	\$6, 71	\$0.40	6.3
Irregular service: Rate per mile with minimum of	Mile	. 04	. 0425	. 0025	6.3
100 miles (unless otherwise specified).					
Through freight: Average rate for specified trips	Day	5.41	5.41	.00	.0
Snowplow and flanger	Mile	. 05	. 05	.00	` .0
Yard: Average rate all yards	Hour	. 395	.41	.015	3.8
· ·		į.			

## Rates of pay of locomotive engineers.

#### NORTHERN DIVISION.

								(	
Class of service.	R	tate.		Ra	Rate. Overtime limit (hours).		Overtime per hour.		
	1911	1913		1911	1913	1911	1913	1911	1913
Passenger runs between: Grand Rapids-Cadil- lac. Grand Rapids-Big Rapids R. 7. Grand Rapids-Tra- verse City. Grand Rapids-Mack- inaw City. Grand Rapids-Mack- inaw City via Har- bor Springs. Cadillac - Mackinaw City. Irregular ser vice: Rates per mie with minimum of 100 miles (unless otherwise speci- fied). Passenger overtime per hour.	4.48 5.80 9.04	\$4.25 4.76 6.16 9.60 10.03 5.44 .0425	Through freight runs between: Grand Rapids Muskegon R. 7. Grand Rapids- Cadillac Cadillac Nackina naw City.	\$4.88 4.88 6.47	\$4.88 4.88 6.47	10.00 10.00 12.48	10.00 10.00 12.48	\$0.49 .49 .49	\$0.488 .488 .647

<sup>&</sup>lt;sup>1</sup> Runs not specified paid at the mileage rate existing in district where run is made, with a minimum of 100 miles or 10 hours.

## Rates of pay of locomotive engineers—Continued.

#### NORTHERN DIVISION-continued.

Class of service.	Ra	ate.	Overtin	me per ur.	Overtime limit (hours).		
	1911	1913	1911	1913 1	1911	1913	
Local freight runs between: Grand Rapids and Big Rapids 2. Big Rapids-Cadillae R. 7. Cadillae-K. S. Tower K. S. Tower-Mackinaw City Traverse City-Walton Junction R. 7 3. Grand Rapids-Muskegon R. 7 4. Cadillae, Lake City, and Jennings Branch. Cadillae-Woods Spurs. Work train, wreck train, and engine trial service, per mile. Snow plow and flanger service, per mile 6. Yard service (per hour): Grand Rapids. Other yards.	\$5.06 5.06 5.06 5.06 5.06 5.06 5.06 5.06	\$5. 13 5. 13 5. 30 5. 30 5. 30 5. 30 5. 13 5. 30 5. 30 5	\$0.46 .46 .46 .46 .46 .46 .46 .46	\$0. 513 . 513 . 53 . 53 . 53 . 513 . 53 . 53 . 53 . 53 . 0505 . 05	11.00 11.00 11.00 11.00 11.00 11.00	10.00 10.00 10.00 10.00 10.00 10.00	

<sup>1</sup> Overtime pro rata in 1913.

#### SOUTHERN DIVISION.

Class of service.	Bate.		cate. Class of service.				Rate.		rtime	Overting (hou	
	1911	1913		1911	1913	1911	1913	1911	1913		
Passenger runs between: Fort Wayne and Richmond. Fort Wayne and Wolcottville R. 7. Fort Wayne and Grand Rapids. Grand Rapids and Kalamazoo R. 7. Irregular service: Rates per mile with minimum of 100 miles (unless otherwise specified). Passenger overtime, per hour.	\$4.10 4.00 5.80 4.10 .04	\$4. 25 4. 25 6. 04 4. 25 . 0425	Through freight runs between; 1 Richmond and Fort Wayne. Fort Wayne and Grand Rapids.			\$0.49	\$0.49	10.00 14.12	10.00		

Class of service.	Ra	ate.	Overti	me per ır.	Overtime limit (hours).	
1.0	1911	1913	1911	1913	1911	1913
Local freight runs between: <sup>2</sup> Richmond-Ridgeville R. 7 Ridgeville-Fort Wayne S. 7 <sup>3</sup> Fort Wayne-Wolcottville R. 7 <sup>4</sup> Kalamazoo-Wolcottville S. 7 <sup>4</sup> Grand Rapids-Kalamazoo R. 7 Irregular and special service per mile 5 Work-train, wreck-train, and engine-trial service, per mile. Snowplow and flanger service 5 Yard service (per hour): Kalamazoo. Other yards.		\$5. 15 5. 15 5. 18 5. 18 5. 18 (6) 6. 0505 . 05 . 41 . 41				

<sup>Runs not specified paid at the mileage rate existing in district where run is made, with a minimum of 100 miles or 10 hours.

Switch lines on basis of local freight service.
Includes switching at Ridgeville.
Includes switching at Wolvottville.
Minimum of 100 miles or 10 hours.
Runs not specified paid at the mileage rate existing in the district where run is made, with a minimum of 100 miles or 10 hours.
Paid on local freight basis—minimum of 100 miles or 10.hours.</sup> 

Includes switching at Big Rapids.
Includes switching at Traverse City.
Includes switching at Muskegon.

Paid on local freight basis—minimum of 100 miles or 10 hours.
 Minimum of 100 miles or 10 hours.
 Minimum 10 hours.

#### HOCKING VALLEY RAILWAY CO.

As a result of the arbitration award the minimum rate to engineers per mile for passenger service on this railway was advanced 16.4 per cent.

Engineers in through freight service had their rates of pay advanced from 3.3 to 5.6 per cent, according to the class of engines used. In helper and mine-run service rates of pay were 12.5 and 11.8 per cent, respectively, higher after the award than before.

Small increases were secured in yard and work train service,

amounting to 2.5 and 3.3, respectively.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of service.	Rate	Pa	ay.	Increase.		
	per—	1910	1913	Amount.	Per cent.	
Through freight: Engines over 20-inch cylinder Consolidation engines. Other engines Local freight. Helpers, Columbus to Powell and return Work, wreck, and circus. Mine All yards. Minimum rate per mile; 100 miles passenger service.	do Day Trip Day do	\$0.0475 .046 .045 4.75 2.00 4.60 4.25 .40 .0365	\$0.0475 .0475 .0475 5.00 2.25 4.75 4.75 .41 .0425	\$0.00 .0015 .0025 .25 .25 .15 .50 .01	. 0.0 3.3 5.6 5.3 12.5 3.3 11.8 2.5 16.4	

<sup>1 1910,</sup> through passenger service; 1913, passenger service.

## Rates of pay of locomotive engineers.

Class of service.	Rate	P	ay.	Overtin	ne after—	Overti	
	per—	1910	1913	1910	1913	1910	1913
Through freight:  Engines over 20-inch cylinder Consolidation engines. Other engines.  Local freight Helpers, Columbus to Powell and return. Work, wreek, and circus Mine. Called and not used All yards. Passenger: Minimum rate per mile; 100 miles, passenger service. Jackson to Logan and return, including short runs between Wellston and Dundas. Jackson to Logan and return (1 round trip). Dundas to Jackson and return (1 round trip). Dundas to Wellston and return (2 round trips).	Day Day Day	.046 .045 4.75 2.00 4.60 4.25 1.40 .40	\$0.0475 .0475 .0475 5.00 2.25 4.75 1.42 .41 .0425	(2) (2) (2) (2) 10 hours 5 hours 10 hours (4)	(2) (2) (2) (2) (3) 10 hours 5 hours 10 hours (4)	\$0.45 .45 .45 .45 .45 .45 .45 .45 .45 .45	\$0.475 .475 .475 .50 .225 .475 .475 .142 .45

<sup>&</sup>lt;sup>1</sup> Minimum 100 miles or 10 hours.

<sup>2 10</sup> miles per hour.
3 1910, through passenger service; 1913, passenger service.
4 Overtime computed on basis of 20 miles per hour.

<sup>5</sup> After 2 hours late

#### KANAWHA & MICHIGAN RAILWAY CO.

Rates paid to engineers in through passenger service on this railway were advanced 16.4 per cent by the award of the arbitration board. In local freight and work train service an increase of slightly more than 5 per cent was secured by the engineers through the action of the arbitration board, and an advance of 3.3 per cent in rates of pay in through-freight service.

In yard switching service rates of pay were advanced 2.5 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of commiss	Rate per—	Pa	ıy.	Incr	ease.
Class of service.	Kate per—	1910	1912	Amount.	Per cent.
Through passenger. Through freight Local freight Work, wreek, and circus trains. Switching: Yard switching.		\$0.0365 .046 4.75 4.50 .4.00	\$0.0425 .0475 5.00 4.75 4.10	\$0.006 .0015 .25 .25 .10	16.4 3.3 5.3 5.6 2.5

## Rates of pay of locomotive engineers.

Class of service.	Ra	Rate. Basis of day's work. Overtime, per hour.							
	1910	1912	1910	1912	1910	, 1912	1910	1912	
Through passenger	Per mile. \$0.0365		(2)	100 miles or less.	³ <b>\$</b> 0. 45	\$0.50		\$0.0425	
Commuter	\$3.60		(2)	100 miles or		. 50		. 0425	
	Per mile. \$0.046				.46	. 475	\$0.046	. 0475	
Local freight Minimum freight	\$4.75	Per day. \$5.00 4.75	10 hours or less		.45	. 50		.05	
wreck, and circus trains, etc.	4.50	4.75	10 hours or less	less; . 1 0 0	. 45	.475		.0475	
Albany helper	2.75	(4)	Overtime after 5 hours.	miles or less.	.45	(4)		(4)	
Switching: Yard	Per day. \$4.00	4.10	10 hours or less	10 hours orless.	. 45	. 45			

Note.-When Calumet type engines used in freight service, 50 cents per day additional allowed.

<sup>1</sup> Based on minimum day rate of \$4.25 per 100 miles or less.
2 Engineers entitled to minimum allowance of 50 miles per day.
3 Overtime after 2 hours late on schedule per hour.
4 Effective May 1, 1912, through freight rates apply on all pusher or helper or mine-run trains; helpers can be used for any kind of helping service in 10 hours without extra pay, except when they exceed 100 miles. I lelpers on pick-up or local freight receive local pay.
5 Based on minimum day rate of \$4.75 per 10 hours or less, 100 miles or less.

#### Mileage allowance of locomotive engineers.

			Mi	les.
			1910	1912
Passenger mileage allowed: Charleston to Corning via Gallipolis, Middleport, and Athens. Charleston to Hobson via Gallipolis and Middleport. Charleston to Gauley Bridge and return. Middleport to Gauley Bridge via Gallipolis and return. Middleport to Corning via Athens. Hobson to Corning via Athens.			78	141 82 78 239 61 59
	Over	time er—		
	1910	1913		
Freight mileage allowed: Hobson to Columbus via H. V. Ry. Hobson to West Columbus via H. V. Ry. Hobson to West Columbus via T. & O. C. Ry. Hobson to Corning and return. Hobson to Chauncey and return. Hobson to Dickinson. Hobson to Charleston and return.	11 25	H. m. 10 55 11 05 12 25 11 25 10 00 10 00 13 50	109 111 124 114 100 100 138	109 111 124 114 100 100 138

#### LEHIGH VALLEY RAILROAD CO.

Passenger engineers employed on this railroad had their minimum rates of pay increased by the award of the arbitration board from 15 to 25 cents a day. In mine-run service the rates of pay to engineers were increased from \$4.50 to \$4.75 a day, and in pusher, helper, and work-train service from \$4.30 to \$4.75 a day.

Yard engineers were advanced 10 cents a day, or 2.5 per cent; and engineers employed on local freight trains, 30 cents a day, or 6.4 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Clay of syrving	Rate p	er day.	Increase.				
Class of service.	1911	1913	Amount.	Per cent.			
Passenger: J-54 class engines or heavier. All other engines. Mine runs: All other engines. Pusher, helper, and work train: All other engines. Local freight and pick-up: All other engines. Yard service: All other engines.	4.30	\$4. 25 4. 25 4. 75 4. 75 5. 00 4. 10	\$0. 15 . 25 . 25 . 45 . 30 . 10	3.7 6.3 5.6 10.5 6.4 2.5			

<sup>1</sup> Exclusive of specified trips for which various rates are given.
2 Where this rate does not equal through rate for same distance, through rate to apply.

Class of service	Rate p	er day.	Overtime	e per hour.
Class of service.	1911	1913	1911	1913
Passenger:				
J54 class engines or heavier	1 \$4.10	\$4.25	2 \$0.41	\$0.50
All other engines	14.00	4.25	2.40	. 50
Mine runs:				
J54 class engines or heavier	4.65		Actual time paid	
			for according to	Basis of 10 miles an
N2 class engines.		5.00	dodo	hour; pro rata on
M31 class engines or heavier	4.75	3.00	do	minute basis.
All other engines	4.50		do	
Pusher, helper, and work trains:	2100			
J54 class engines or heavier	4.50		Overtime after 10	1
			hours.	Do.
N2 class engines		5.00	do	1
All other engines	4.30	4.75	do	)
Local freight and pick-up service:  J54 class engines or heavier	3 4. 85		do	)
N2 engines	4.50	5 25	do	Do.
All other engines	3 4. 70	5.00	dodo	10.
Yard service:	2000	0,00		,
M37 and N1 class engines	4.50		do	1
M34 to M38 class engines, inclusive, J55s,		4.50	do	Overtime after 10
N1s, and N2s.	4 00			hours.
All other engines	4.00	4.10	do	J
Through freight: N2 class engines.		5.00		.50
All other engines.		4.75		. 475
an one one mo		7.10		. 110

Rate of pay per day on any division in which the service is not covered by specified allowance:	
M3i class engines or heavier	\$4.75
J54 class engines or heavier.	4.65
All other engines	4.50

#### MICHIGAN CENTRAL RAILROAD CO.

On this railroad rates of pay to engineers in through and way freight and circus train service were not advanced as a result of the award of the arbitration board.

Passenger engineers received an increase of 10 cents a day, which amounted to 2.4 per cent. Engineers employed on work and wreck trains had their rates of pay advanced from 3.3 to 5.4 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of service.	Doto non	1910	1912	Increase.		
Class of service.	Rate per—		1912	Amount.	Per cent.	
Passenger	Day	\$4.15	\$4. 25	\$0.10	2. 4	
Through freight: 1 Engines with cylinders over 19 by 24 Engines with cylinders 19 by 24 and under	do	4. 85 4. 75	4.85 4.75	.00	.0	
Way freight: 2 3-crewed way freights and locals	Month	117. 50		.00	.0	
Engines with cylinders over 19 by 24 Engines with cylinders 19 by 24 and under	Day	4.60 4.60	4. 85 4. 75	. 25	5. 4 3. 3	
Circus train: Engines with cylinders over 19 by 24.	do	4.85	4. 85	.00	.0	
Engines with cylinders 19 by 24 and under			4, 75	.00	.0	
Chicago district. At points where only 1 switch engine works	do	. 39	.41	.00	5.1	
All other points. East division: Way freights	Month	. 40 117. 50	. 41 117. 50	.01	2.5	

<sup>&</sup>lt;sup>1</sup> All single-crewed way freights or locals, 100 miles or less, 10 hours or less per day, rate of 60 cents per day in addition to through freight rate: overtime pro rata. Engineers in snowplow and flanger service, 100 miles or less, 10 hours or less a day, at through freight rates.

<sup>2</sup> Switching and caring for trains at all stands additional at schedule rates.

 <sup>1</sup> Exclusive of specified trips for which various rates are given.
 2 100 miles or less, 10 hours or less, constitute a day. Overtime in 1911 paid for actual time on the basis of 10 hours a day or less, 100 miles or less.
 3 Where this rate does not equal through rate for same distance, through rate to apply.

Class of service.	Ra	te.		Bas	is of a da	y's work	:.	
Class of service.	,1910	19	912	1910	)	19	12	
Passenger, per day	\$4.15	8	4. 25	100 miles o	r less	100 mil	100 miles orless.	
Engines with cylinders over 19 by 24, per day	4.85	,	4.85	100 miles o hours or		10 h	es orless, ours or	
Engines with cylinders 19 by 24 and under, per day.	4.75	4	4.75	do		less.	ο, ΄	
Way freight: 1 3-crewed way freights and locals, per month.	117.50	11	7. 50	Overtime hours.	after 12		ime after ours.	
Road work or wrecking-train service: Engines with cylinders over 19 by 24, per day Engines with cylinders 19 by 24 and under, per day.	4.60 4.60		4.85 4.75	10 hours of			rs or less.	
Circus-train service: Engines with cylinders over 19 by 24, per day Engines with cylinders 19 by 24 and under, per day.	4.85 4.75			dodo.				
Switching: 2 Chicago district, per hour. At points where only 1 switch engine works, per hour. All other points, per hour.	.41 .39 .40		.41 .41	gines, 1 or less; crewed	Double-crewed engines, 10 hours or less; single-crewed engines,		o.	
East division: Way freights, per month	117.50	113	7.50		Overtime after 9		me ait <b>er</b> irs.	
Class of service.			0	vertime per	hour.	Overti	me per	
•				1910	1912	1910	1912	
Passenger, per day					\$0.50	\$0.415	\$0.425	
Through freight: 1 Engines with cylinders over 19 by 24, per day. Engines with cylinders 19 by 24 and under, per Way freight: 1 3-crewed way freights and locals, per	dav		0.4	185 175 15	. 485 . 475 . 45	. 0485	. 0485	
Road work or wrecking-train service: Engines with cylinders over 19 by 24, per day Engines with cylinders 19 by 24 and under, per Switching: <sup>2</sup>	day			16 16	. 485 . 475	. 046	. 0485 . 0475	
Chicago district, per hour		• • • •	eı	ngines, pro	. 41			
At points where only 1 switch engine works, per All other points, per hour					. 41 . 41			

<sup>&</sup>lt;sup>1</sup>-All single-crewed way freights or locals, 100 miles or less, 10 hours or less per day. Rate of 60 cents per day in addition to through freight rates, overtime pro rata. Engineers in snow-plow and flanger service, 100 miles or less, 10 hours or less, a day, at through freight rates.

<sup>2</sup> Switching and caring for trains at all stands additional at schedule rate.

#### NEW YORK, CHICAGO & ST. LOUIS RAILROAD CO.

The rates of pay to passenger engineers on a trip basis were increased by the arbitration board between 3 and 4 per cent.

The increase in rates allowed in pick-up freight service ranged from 1.4 to 2.3 per cent; in through freight service, from three-tenths of 1 per cent to 2 per cent.

The hourly rates in yard service were increased 5.8 per cent and the trip rates in local freight service were advanced approximately

2 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

	Rate per—	1010	1010	Increase.		
Class of service.	Nate per—	1910	1912	Amount.	Per cent.	
Passenger (specified runs):  Buffalo division Cleveland division Chicago division Passenger runs of 100 miles or less, not specified. Stony Island and La Salle Street Station, passenger transter. Freight, pick-up: Buffalo division Cleveland division Cleveland division Chicago division Warne division Through freight: Buffalo division Chicago division Through freight: Buffalo division Cleveland division Cleveland division Cleveland division Cleveland division Cleveland division Local freight: Buffalo division Local freight: Buffalo Junction to Conneaut Average rate per trip, specified runs.	do d	5. 40 5. 10 5. 85 4. 10 5. 90 6. 45 6. 10 4. 60 . 3875 5. 40 6. 10 6. 60 6. 60 60 60 60 60 60 60 60 60 60 60 60 60 6	\$4. 93 5. 61 5. 27 5. 99 4. 25 5. 00 5. 70 6. 60 6. 20 6. 20 4. 75 41 5. 415 6. 27 5. 89 6. 65 5. 70 5. 89	\$0. 18 . 21 . 17 . 14 . 15 . 00 . 00 . 15 . 10 . 10 . 10 . 10 . 12 . 09 . 05 . 10 . 11 . 12	3.8 3.9 3.3 2.4 3.7 0.0 0.0 2.3 1.6 1.4 3.3 5.8 0.3 2.0 0.8	

#### Rates of pay of locomotive engineers.

	Rate per trip.		Mile	age.	Overtime aft	er.
Passenger service.	1910	1912	1910	1912	1910	1912
Specified runs:  Buffalo division.  Cleveland division.  Fort Wavne division.  Chicago division.  Cleveland and Conneaut.  Cleveland and Bellevue.  Cleveland short runs.  Passenger runs of 100 miles or  less, not specified.  Bellevue to Fostoria and return or reverse.  Stony Island and LaSalle  Street station, passenger transfer.	\$4.75 5.40 5.10 5.85 15.40 15.30 24.15 4.10 4.15 5.00	\$4.93 5.61 5.27 5.99 4.25 4.25 *5.61 4.25	116 132 124 141 136 128 (4)	116 132 124 141 67 65 (4)	After 2 hours in excess of schedule time of regularly scheduled trains. All other trains after 12 hours.  No overtime allowance.	H. M

And return, or reverse.
 Cleveland and Vermillion, and Cleveland and Dover excursion trains.
 Cleveland to Vermillion and return, including going to Euclid Avenue or points between Broadway Depot and to Sheffield to turn engine.

<sup>51393°—</sup>S. Doc. 493, 64-1——15

## Rates of pay of locomotive engineers-Continued.

	R	ate p	er tri	ip.	Mile	age.	Overtin	ne after-	_
Through freight service.	1	910	191	13	1910	1913	1910	1918	3
Specified runs: Buffalo division. Cleveland division. Fort Wayne division. Chicago division. Local freight: Buffalo Junction to Conneaut. Buffalo Junction to Brockton and return.		5. 40 6. 15 5. 80 6. 60 5. 60 4. 90	\$5.4 6.2 5.8 6.6	27 39 35 70	114 132 124 140 114 96	114 132 124 140 114 96	12 hoursdodododododo	H. 11 13 12 14 11 10	M. 24 12 24 24
Brockton and Conneaut. Cleveland and Conneaut Cleveland and Bellevue Bellevue and Leipsic Junction. Leipsic Junction and West Fort Wayne. Fort Wayne and Knox. Knox and Stony Island.		4.90 4.90 4.90 4.90 4.90 4.90 4.90	5. ( 5. ( 5. ( 5. ( 5. ( 5. ( 5. (	00 00 00 00 00	65 68 64 62 62 80 61	65 68 64 62 62 80 81	dododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododododo	do. do. do. do. do. do.	
Froight service, pick-up rates.	10	Per i	trip.		Miles	1913	Overtin	ne after	
Runs: Buffalo division Cleveland division Fort Wayne division Chicago division	6	5. 70 5. 45 5. 10 5. 90	\$5. 6. 6. 7.	60 20	114 132 124 140	114 132 124 140	12 hoursdododo	. 13	M. 24 12 24
Work train rates.	Rate	per d	ау.		Overtin	ie after.		rtime p hour.	er
	1910	91	113		1910	1913	1910	191	.3
All districts	\$4.60	\$4	1.75	10	hours	10 hour	\$0.4	6 \$0.	475
					,		Rate p	er hour	
Yard rates	s.						19101	1913	2
Localities: Chicago Fort Wayne Fostoria Bellevue Cleveland Conneaut Erie Buffalo							\$0.40 .39 .37 .39 .395 .39 .37 .395	\$0	0.41 .41 .41 .41 .41 .41

<sup>&</sup>lt;sup>1</sup> 12 hours or less constitute a day. Overtime after 12 hours pro rata.

<sup>2</sup> 10 hours or less constitute a day. Overtime pro rata after 10 hours.

#### NEW YORK, NEW HAVEN & HARTFORD RAILROAD CO.

Switching engineers on this railroad received no increase in rates of pay from the application of the award of the arbitration board. In local freight service an increase in rates of pay of 35 cents a day was granted, which amounted to 7.5 per cent.

The rates to passenger engineers were increased 3.7 per cent, and to engineers in all classes of freight service except local freight, 10 cents a day, or 2.2 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of service.	Rate per—	1910	1912	Increase.		
Class of service.	nate per—	1910	1912	Amount.	Per cent.	
Passenger: Standard. Minimum. Through freight, work trains, etc1 Local freight. Switching: Eight-hour yards. Ten-hour yards.	do	\$0.041 4.10 4.65 4.65 3.50 4.10	\$0.0425 4.25 4.75 5.00 3.50 4.10	\$0.0015 .15 .10 .35 .00	3.7 3.7 2.2 7.5	

<sup>&</sup>lt;sup>1</sup> Includes wreck, pusher, helper, circus, and milk trains, 1913.

## Rates of pay of locomotive engineers.

Class of service.	Rate pe	er day.	Basis of a c	lay's work.	Overting ho	me, per ur.	Overtime per mile.	
	1910	1912	1910	1912 1910		1912	1910	1912
Passenger: Standard	1 \$0. 0410	<b>\$0.</b> 0425	100 miles or less; 10 hours or less.	(3)	\$0.41	<b>\$0.</b> 50	\$0.041	\$0.0425
Minimum Through freight, work trains, etc <sup>3</sup>	4. 10 4. 65	4. 25 4. 75	do	100 miles or less; 10 hours	. 41	.50 4.475	.041	.0425
Local freight Switching:	4.65	5.00	do	or less.	. 465	. 50	. 0465	. 05
Eight-h o u r	3.50	3. 50	8 hours or less	8 hours or less	Pro rata.5	Pro rata.5		
Ten-hour yards.	4.10	4.10	10 hours or less.	10 hours or less.	do.5	do.5		

## NEW YORK, SUSQUEHANNA & WESTERN RAILROAD CO .-- WILKES-BARRE & EASTERN RAILROAD.

Unusually large increases were secured by the engineers on this railroad as the result of the award of the arbitration board.

The rate per mile paid to passenger engineers was advanced 9 per cent; to through freight engineers, 18.8 per cent; and to local freight engineers, 25 per cent. Switching engineers had their rates of pay increased 65 cents a day, or 18.8 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of service.	Rate per—	1910	1913	Increase.		
	Trato por	1010	1010	Amount.	Per cent.	
Passenger Through freight Local treight Switching	MiledododoDay.	. 04	\$0.0425 .0475 .05 4.10	\$0.0035 .0075 .01 .65	9. 0 18. 8 25. 0 18. 8	

<sup>1</sup> Rate per mile.
2 Local passenger service, 100 miles or less, 10 hours or less. Through passenger service, 100 miles or less.
Overtime computed on basis of 20 miles per hour on the minute basis.
2 Includes wreek, pusher, helper, circus, and milk trains, 1913.
4 Overtime computed on basis of 10 miles per hour and paid for pro rata on minute basis.
5 Engineers on switching jobs in 1910 required to work overtime exceeding one-half of the regular day paid

Class of service.	Rate per—	1910	1913	Basis of d	ay's work.		rtime hour.	Overtime per mile.	
	per—			1910	1913	1910	1913	1910	1913
Passenger	do	033	\$0. 0425 . 0475	100 miles or less, 10 hours or less.	(1) 100 miles or less, 10 hours or less.	\$0.40		\$0.04	\$0.0475
Local freight Switching Lodi branch	Day		. 05 4. 10	do 10 hours or less.	do 10 hours or less.	.40	. 50′	.04	. 05
Passaic branch		4.00							

<sup>&</sup>lt;sup>1</sup> Runs arranged to suit the service. For runs that can not be scheduled so that 100 miles or more can be made, 100 miles allowed.

#### PENNSYLVANIA RAILROAD CO.-LINES EAST.

On the Pennsylvania lines east of Pittsburgh the award of the arbitration board resulted in an increase in rates of pay to through passenger engineers ranging in general between 1 and 2 per cent and to local passenger engineers the advances secured were in general somewhat lower.

In through-freight service, as well as in helper and yard service, no increases in rates of pay were allowed. Engineers employed on work trains had their rates of pay advanced between 2 and 3 per cent.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

		Through	h passenge	r.	Local passenger.						
Division.	Trip	rate.	Incr	ease.	. Trip	rate.	Increase.				
	1910	1912	Amount.	Per cent.	1910	1912	Amount.	Per cent.			
Sehuylkill	\$5.00 5.233	\$5.00 5.24	\$0.00 .007	0.0							
Bellwood Philadelphia Middle	5.18 6.745 5.48	5. 245 6. 745 5. 61	.065 .00 .13	1.3 .0 2.4	\$5.24 5.40	\$5.24 5.40	\$0.00 .00	0.0			
Cresson Pittsburgh Conemaugh	5. 293 5. 13	5.399 5.13	.106	2.0	6. 437 5. 69	6.508 5.736	.071 .046	1.1			
Williamsport and Susque- hanna. Renovo	6.06 5.243 7.279	6. 20 5. 303 7. 381	.14 .06 .102	2.3 1.1 1.4	5.418	5.515	.097	1.8			
Elmira Baltimore Bedford	4. 17 5. 40	4.17	.00	.0	5. 433 5. 34	5. 458 5. 38	.025	.5			
Monongahela New York Sunbury and Shamokin	5.48 7.627 6.72	5. 585 7. 707 6. 89	.105 .08	1.9 1.0 2.5	5, 395	5, 443	.048	. 9			
Allegheny Maryland Camden Terminal	5. 915 6. 623 5. 47	6.055 6.67 5.47	.14 .047	2.4 2.4 .7	5. 021 5. 239	5. 09 5. 275	.069	1.4			
Delaware Central Buffalo	5. 589 4. 902 6. 395	5.664 4.902 6.48	.00 .075 .00 .085	1.3 .0 1.3	4.898	4.904	.006	. 12			

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912—Continued.

		Throu	igh freight.		Local freight.					
Division.	Trip	rate.	Iner	ease.	Trip	rate.	Increase.			
	1910	1912	Amount.	Per cent.	1910	1912	Amount.	Per cent.		
Schuylkill Tyrone Bellwood.	\$5.33 4.224 3.341	\$5.33 4.224 3.341	\$0.00 .00 .00	0.0 .0 .0	\$5.601 5.33 5.33	\$5.756 5.61 5.61	\$0.155 .28 .28	2. 8 5. 3 5. 3		
Philadelphia Middle Cresson Pittsburgh	6.337 5.295 5.124 4.928	6.354 5.295 5.124 4.928	.017 .00 .00	.3 .0 .0	5. 759 5. 33 5. 391	6.047 5.61 5.661	.288 .28 .27	5. 0 5. 3 5. 0		
Conemaugh. Williamsport and Susque- hanna.	5.007 5.849	5. 007 5. 849	.00	.0	5.422 5.38	5. 705 5. 61	. 283	5.2 4.3		
Renovo TrentonElmira. Baltimore	3. 171 5. 33 5. 493 7. 269	3. 171 5. 33 5. 493 7 269	.00 .00 .00	.0 .0 .0	4.304 5.711 5.58 5.38	4. 488 6. 01 5. 61 5. 61	.184 .299 .03	4.3 5.2 		
Bedford Monongahela New York	5. 138 5. 419 6. 729 5. 378	7. 269 5. 138 5. 419 6. 729	.00 .00 .00	.0 .0 .0	5.38 5.33 5.642 5.33	5. 61 5. 929 5. 61	.23 .28 .287 .28	5.3 5.1 5.3		
Battimore Bedford Monongahela New York Sunbury and Shamokin Allegheny Maryland Camden Terminal	4.716 4.918	5. 419 6. 729 5. 378 4. 716 4. 918	.00	.0 .0 .0	5. 477 5. 828 6. 364	5.695 6.12 6.489	.218 .292 .125	4.0 5.0		
Delaware	5. 485	5. 33	.00	.0	5. 591 5. 525 5. 609	5. 883 5. 815 5. 888	. 292 . 29 . 279	5. 2 5. 2 5. 0		
	Helper. Passenger an							and freight.		
Division.	Trip	rate.	Incr	ease.	Trip	rate.	Incr	ease.		
·	1910	1912	Amount.	Per cent.	1910	1912	Amount.	Per cent.		
Tyrone Philadelphia Cressou	\$1.07 6.148 5.33	\$1.07 6.148 5.33	\$0.00 .00 .00	0.0						
Cresson Pittsburgh Conemaugh Renovo Baltimore.	1 3.398 5.33 2.767 1.688	1 3.403 5.33 2.767 1.688	. 005 . 00 . 00 . 00	.1	\$5.575	\$5.575	\$0.00	0.0		
Bedford. Sunbury and Shamokin Allegheny	9 67	2. 67 1. 60	.00	.0	5. 825	6.12	. 295	5.1		
		Ligh	t engine.			Misce	ellaneous.			
Division.	Trip	rate.	Inc	rease.	Tr	ip rate.	In	crease.		
	1910	1912	Amount.	Per cent.	1910	1912	Amount.	Per cent.		
Philadelphia	\$4.795	\$4.795	\$0.00	0.0						

<sup>1</sup> Average of freight and passenger helper combined.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912—Continued.

		Work	train.		Yard.1						
Division.	Rate pe	er hour.	Incr	ease.	Rate pe B8 or		Rate per hour, smaller than B8.				
	1910	1912	Amount.	Per cent.	1910	1912	1910	1912			
Schuylkill	\$0.488	\$0.498	\$0.01	2.0							
Tyrone		.498	.013	2.7	\$0.435	\$0.435	\$0.41	\$0.41			
TyroneBellwood	. 485	. 498	.013	2.7	. 435	. 435	.41	. 41			
Philadelphia	.488	.498	.01	2.0	. 435	. 435	.41	.41			
Middle	} .488	. 499	,011	2.3	ſ .435	. 435	.41	.41			
Altoona shop yard	j l				1 .435	. 435	.41	. 41			
Cresson	.485	. 498	. 013	2.7	. 435	. 435	.41	. 41			
Pittsburgh	.488	. 498	.01	2.0	. 435	. 435	.41	.41			
Conemaugh	.488	. 498	.01	2.0	.435	. 435	.41	. 41			
Williamsport and Susque-	100	400	0.1	0.0	40.	40.5					
hanna	.488	.498	.01	2.0	. 435	. 435	.41	.41			
Renovo	.488	.498	.01	2.0	. 435	. 435	.41	.41			
Elmira	.485	. 498	.013	$\frac{2.7}{2.0}$	. 435	. 435	. 41	.41			
BaltimoreBedford	.488	.498	.013	$\frac{2.0}{2.7}$	. 435	. 435	.41	.41			
Monongahela	.488	.498	.013	2.7	.435	. 435	.41	.41			
Mony Vork	.485	.498	.013	$\frac{2.0}{2.7}$	.448	. 448	.42	.45			
New York Sunbury and Shamokin	.488	.498	.01	2.0	.435	. 435	.41	.41			
Alleghenv	.488	.498	.01	2.0	.435	. 435	.41	.41			
Maryland	.496	. 504	.008	1.6	.435	. 435	.41	.41			
Camden Terminal	.485	.498	.013	2.7	.435	. 435	.41	.41			
Delaware	.485	.498	.013	2.7	.435	.435	.41	.41			
Central.	.485	.498	.013	2.7							
Buffalo	.488	. 500	.012	2.5	. 435	. 435	.41	.41			
Philadelphia terminal					. 435	. 435	.41	. 41			
•											

<sup>1</sup> No increase.

# Average rate of pay per trip of locomotive engineers.

						3		
	Т	hrough	passenge	r.		Local pa	assenger.	
Division.	Trip rate. Overtime.			Trip	rate.	Overtime.		
	1910	1912	1910	1912	1910	1912	1910	1912
Schuylkill		\$5.00	\$0.415	\$0.50				
Tyrone. Bellwood.	5. 233 5. 18	5. 24 5. 245	. 415	. 50				
Philadelphia		6.745	. 415	. 50	\$5, 24	\$5, 24	\$0, 415	\$0, 50
Middle.	5. 48	5. 61	.415	.50	5. 40	5. 40	. 415	. 50
Cresson	5. 293	5.399	. 415	. 50				
Pittsburgh	5. 13	5. 13	. 415	. 50	6. 437	6. 508	. 415	. 50
Conemaugh Williamsport and Susquehanna	6,06	6, 20	. 415	. 50	5. 69 5. 418	5. 736 5. 515	. 415	. 50
Renovo	5. 243	5. 303	.415	.50	0.410	9. 919	. 410	. 30
Trenton	7, 279	7. 381	. 415	. 50	5,00	5. 00	. 415	. 50
Elmira					5. 433	5. 458	. 415	. 50
Baltimore	4.17	4.17	.415	. 50	5. 34	5.38	. 415	. 50
Bedford		5. 40 5. 585	. 415	. 50				
New York	7. 627	7. 707	.415	.50				
Sunbury and Shamokin	6. 72	6.89	.415	. 50	5. 395	5. 443	. 415	. 50
Allegheny	5.915	6.055	. 415	. 50	5.021	5.09	. 415	. 50
Maryland	6. 623	6. 67	. 415	. 50	5. 239	5. 275	. 415	. 50
Camden Terminal	5. 47 5. 589	5. 47 5. 664	.415	. 50				• • • • • • • •
Central	4. 902	4. 902	.415	50				
Buffalo	6. 395	6.48	415	.50	4.898	4.904	. 415	. 50

Average rate of pay per trip of locomotive engineers—Continued.

	11	Through	freight.			Local	reight.	
Division.	Trip	rate.	Over	time.	Trip rate.		Over	time.
	1910	1912	1910	1912	1910	1912	1910	1912
Schuylkill	\$5. 33 4. 224 3. 341 6. 337 5. 295	\$5. 33 4. 224 3. 341 6. 354 5. 295	\$0. 485 . 486 . 485 . 487 . 485	\$0. 485 . 486 . 485 . 487 . 485	\$5. 601 5. 33 5. 33	\$5. 756 5. 61 5. 61	\$0. 497 . 485 . 485	\$0. 51 . 51 . 51
Cresson Pittsburgh Conemaugh Williamsport and Susquehanna Renovo	5. 124 4. 928 5. 007 5. 849 3. 171	5. 124 4. 928 5. 007 5. 849 3. 171	. 485 . 486 . 486 . 486 . 485	. 485 . 486 . 486 . 486 . 485	5. 33 5. 391 5. 422 5. 38 4. 304	5. 61 5. 661 5. 705 5. 61 4. 488	. 485 . 49 . 485 . 49 . 49	.51 .51 .51 .51
Trenton. Elmira. Baltimore. Bedford. Monongahela. New York	5. 33 5. 493 7. 269 5. 138 5. 419 6. 729	5. 33 5. 493 7. 269 5. 138 5. 419 6. 729	. 485 . 485 . 485 . 485 . 485 . 485	. 485 . 485 . 485 . 485 . 485 . 485	5. 711 5. 58 5. 38 5. 33 5. 642 5. 33	6. 01 5. 61 5. 61 5. 61 5. 929 5. 61	. 485 . 485 . 49 . 485 . 488 . 485	. 51 . 51 . 51 . 51 . 51
Sunbury and Shamokin	5. 378 4. 716 4. 918 5. 33	5. 378 4. 716 4. 918 5. 33	. 486 . 486 . 492	. 486 . 486 . 492	5. 477 5. 828 6. 364 5. 591 5. 525	5. 695 6. 12 6. 489 5. 883 5. 815	. 49 . 489 . 485 . 485 . 485	. 51 . 51 . 51 . 51 . 51
Buffalo	5. 485	5. 485	. 489	. 489	5. 609	5. 888	. 486	. 51
		Hel	per.		Pa	ssenger	and freig	ht.
Division.	Trip	rate.	Over	time.	Trip	rate.	Over	time.
	1910	1912	1910	1912	1910	1912	1910	1912
Tyrone. Philadelphia. Cresson Pittsburgh	\$1.07 6.148 5.33 1 3.398	\$1.07 6.148 5.33 1 3.403	\$0.485 .485 .485 1.452	\$0.485 .485 .485 1.487	\$5, 575	\$5. 575	\$0.485	\$0, 485
Conemaugh Renovo Baltimore Bedford Sunbury and Shamokin	5. 33 2. 767 1. 688 2. 67	5. 33 2. 767 1. 688 2. 67	. 485 . 485 . 485 . 485	. 485 . 485 . 485 . 485	\$0.070	\$0.010	50.485	⊕U. 400
Sunbury and Shamokin	1.60	1.60	.485	.485	5. 825	6.12	. 488	. 510
		Light	engine.			Miscell	aneous.	
Division.	Trip	rate.	Over	time.	Trip	rate.	Over	time.
	1910	1912	1910	1912	1910	1912	1910	1912
Philadelphia Elmira Maryland	\$4. 795 1. 191	\$4. 795 1. 194	<b>\$0.</b> 485	\$0. 485 . 485	\$5.33	<b>\$5.</b> 33	\$0.485	\$0.485

<sup>· 1</sup>Average of freight and passenger helper combined.

## Average rate of pay per hour of locomotive engineers.

	Work	trains.		Ya	rd.	
Division.	1910	1912	B8 or	larger.	Smaller than B8.	
·			1910	1912	1910	1912
Schuyl' ill		<b>\$</b> 0.498	\$0, 435	\$0, 435	\$0.41	00 41
Tyrone. Bellwood	. 485	. 498	. 435	. 435	. 41	\$0.41 .41
Philadelphia Middle	100	. 498	. 435 { . 435	. 435	. 41	. 41
Altoona Shop Yard	. 485	. 498	. 435	. 435	.41	. 41
Pittsburgh Conemagh	. 488	. 498 . 498 . 498	. 435 . 435 . 435	. 435	.41	. 41
Williamsport and Susquehanna Renovo Elmira	. 488	498	. 435	. 435 . 435 . 435	.41	. 41 . 41
Baltimore. Bedford	. 488	. 498	. 435	. 435	.41	.41
Monongahela New Yori	. 488	.498	.435	.435	.41	.41
Sunbury and Shamo in	. 488	.498	. 435	. 435	. 41	. 41
Maryland Camden Terminal	. 496	.504	. 435 . 435 . 435	. 435 . 435 . 435	.41	. 41 . 41 . 41
Delaware. Central	. 485	.498	. 435	. 435	.41	. 41
Buffalo Philadelphia Terminal	. 488	.50	.435	435	. 41	. 41
Timadelpina Terumai			.433	. 430	.41	.41

#### PITTSBURGH & LAKE ERIE RAILROAD CO.

As a result of the application of the award of the arbitration board rates of pay on this railroad to engineers in passenger and freight service, as a general rule, were increased 15 cents per day or per trip.

Exceptions to this are to be noted in the case of yard service, where the engineers received an increase of only 1 cent a day, and in passenger service on a mileage basis where the existing rates were not advanced.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

Class of service.	Rate per—	P	ay.	Increase.		
	14400 por	1910	1912	Amount.	Per cent.	
Average rate, specified runs. All runs not specified. Way freight 1 Drag service. Work train. Wreck train. Pusher (1910, Rankin pusher) Yard service. Passenger.	dodododododododododododododododo	4. 60 4. 85 4. 85 4. 80 4. 60	\$5, 50 4, 75 5, 00 5, 00 4, 80 4, 60 4, 75 4, 51 . 043	\$0. 08 .15 .15 .15 .00 .00 .15 .01	1.5 3.3 3.1 3.1 .0 .0 3.3 .2	

<sup>1</sup> Way freight rates also apply to trains 224, 225, 86, 2d 73, and circus trains.

	Rate p	er trip.	Basis of a	lay's work.		rtime hour.	
	1910	1912	1910	1912	1910	1912	
SPECIFIED RUNS.							
McKees Rocks and Haselton McKees Rocks and Dickerson Run.	\$4.60 4.60	\$4.75 4.75	10 hours or less	10 hours or less	\$0.47 .47	\$0.475 .475	
McKees Rocks and Glassport.	4.60	4.75		do	.47	.475	
round trip.	1.00						
McKees Rocks and Newell	4.60	4.75		do		. 478	
McKees Rocks and Ferrona	4.80 5.45	4.95 5.45	do	do	. 47	.475	
McKees Rocks and Smithdale, round trip.	5.45	5.45	12 hours or less	12 hours or less	.47	.4/6	
McKees Rocks and New Castle.	6.25	6.25	14 hours or less	14 hours or less	. 47	. 475	
round trip.							
McKees Rocks and Jacobs Creek,	6.35	6.35	do	do	.47	. 475	
round trip. McKees Rocks to Thirty-fourth		5,00		10 hours or less		. 50	
Street, to Monaca and return to		0.00		10 110 011 01 1000		1 .00	
McKees Rocks, or vice versa.							
McKees Rocks and L. S. & M. S.	5.45	5.60	10 hours or less	do	. 47	.475	
yard (Youngstown) or Brier Hill and return to Haselton.							
Haselton, Pittsburgh, and McKees	4, 80	4, 95	do	do	.47	. 475	
Rocks.							
Glassport and points on the Mo-	4.70	4.75	do	do	.47	. 47	
nongahela division between Belle Vernon and Newell, in-							
clusive, round trip.							
Glassport and Haselton	6.25	6.25	14 hours or less	14 hours or less	.47	. 47	
Glassport and L. S. & M. S. yard	7.15	7.15	do	do	. 47	. 47	
(Youngstown) or Brier Hill and							
return to Haselton. Dickerson Run and Rankin.	6, 35	6, 35	do	do	.47	. 47	
round trip.	0.00	0.00					
Newell and Rankin, round trip	6.15	6.15	13 hours or less	13 hours or less	. 47	. 47	
Haselton and New Castle, round	4.60	4.75	10 hours or less	10 hours or less	. 47	. 47	
trip. All runs not specified	4.60	4.75	do	do	.47	. 47	
in the poemou.	1.00	21.10					
SPECIFIED SERVICE.							
Way freight 1	2 4 95	2 5, 00	do	do	47	. 50	
Drag service	2 4 85	<sup>2</sup> 5.00		dodo		.50	
Work-train service.	2 4. 80	2 4.75		do		. 47	
Wreck-train service	2 4.60	2 4.75	10 hours or less	do	.47	. 47	
Pusher (1910, Rankin pusher)	2 4, 60	2 4.75	12 hours or less	do	. 47	.47	
Yard service	2 4.50	2 4. 51		11 hours or less		.41	
Passenger service	.043	8 .043	100 miles or less	100 miles or less	4 . 43	4 . 5	

<sup>1</sup> Way-freight rates also apply to trains 224, 225, 86, 2d 73, and circus trains.

#### TOLEDO & OHIO CENTRAL RAILWAY CO.

Passenger engineers on this railway were granted an advance of 16.4 per cent on a mileage basis by the decision of the arbitration board.

No increases in rates of pay in through freight service on engines with cylinders 21 inches or over in diameter were allowed. On through classes of engines in this branch of the service rates of pay were increased from 3.3 to 5.6 per cent. Engineers on local, work, and wreck train service had their rates of pay increased 25 cents a day; and in mine-run service, 50 cents a day. In through freight service the minimum guaranty per month during light-traffic conditions was in the case of regular engineers advanced from \$100 to \$125 and to extra engineers from \$65 to \$80.

Rate per mile.

When passenger engines arrive at ashpit 45 minutes after schedule time of arrival at terminal, 1 hour allowed in addition to the mileage; when arriving at coal dock 1 hour and 15 minutes late, 2 hours paid.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

	T) 4	1010	1010	Increase.		
Class of service.	Rate per—	1910	1913	Amount.	Per cent.	
Passenger Through freight: Engines of 21-inch cylinders or over Engines of 20-inch cylinders Engines of less than 20-inch cylinders Local freight:	do	\$0.0365 .0475 .046 .045	1 \$0.0425 1.0475 1.0475 1.0475	\$0.006 .00 .0015 .0025	16.4 0.0 3.3 5.6	
Locals 71, 72, 88, and 89. All other locals. Mine runs. Work, wreck, circus trains, etc. Switching.	do do	4. 90 4. 75 4. 25 4. 50 . 40	5. 15 5. 00 4. 75 4. 75 . 41	. 25 . 25 . 50 . 25 . 01	5.1 5.3 11.8 5.6 2.5	

<sup>1</sup> Minimum rate.

## Rates of pay of locomotive engineers.

Class of service.	Rate	1910	1913		rtime hour.	Basis of d	ay's work.
0.000	per			1910	1913	1910	1913
Passenger	Mile	<b>\$</b> 0.0365	1 \$0.0425	\$0.45	\$0.50		100 miles or less.
Engines of 21-inch cylin-	do	. 0475	1.0475	. 475	. 475	100 miles or	do.
ders or over. Engines of 20-inch cylin-	do	. 046	1.0475	. 46	. 475	do	do.
ders. Engines of less than 20- inch cylinders.	do	.045	1.0475	. 45	. 475	do	do.
Local freight: Locals 71, 72, 88, and 89	Day	4.90	5.15	.49	. 515	10 hours or less.	10 hours or less, 100 miles or
All other locals Mine runs Work, wreck, circus trains, etc.	do	4.75 4.25 4.50	5.00 4.75 4.75	. 475 . 425 . 45	. 475	dodo	less. do. do. do.
Helpers: Columbus-Amlin (one way). Corning-New Lexington		2.00 2.00	(2) (2) (2)			Overtime after 5 hours.	
Corning - New Lexington (both ways).		2.50	(2)			Overtime af- ter 6 hours.	
Switching	Hour	.40	. 41	. 40	. 41	10 hours or less.	10 hours or less.
Regular engineers	Month	100.00 65.00	125.00 .80.00				
Allowance for yard service when force reduced to a minimum.	do	100.00	100.00				
Called for service and not used.		1.25	1.25				

<sup>1</sup> Minimum rate.

<sup>3</sup> Through freight rates.

## TOLEDO, ST. LOUIS & WESTERN RAILROAD CO.

Passenger engineers employed by this railroad had their rates of pay advanced 45 cents a day by the arbitration award. Through freight and ballast train engineers were advanced 5 cents a day, and local and work train engineers and engineers in helper service 40 cents a day.

The advances made to yard engineers ranged from 10 to 40 cents a day, according to the location of the yard in which they were em-

ployed.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration, effective May 1, 1912.

	Rate p	er day.	Increase.		
Class of service.	1911	1912	Amount.	Per cent.	
Passenger Through freight Local freight Work and helper Ballast, gravel, circus trains, etc Yard: Madison and East St. Louis Toledo All other yards.	\$3.80 4.70 4.60 4.35 4.70 4.00 3,90 3.70	\$4. 25 4. 75 5. 00 4. 75 4. 75 4. 10 4. 10 4. 10	\$0.45 .05 .40 .40 .05 .10 .20 .40	11.8 1.1 8.7 9.2 1.1 2.5 5.1 10.8	

## Rates of pay of locomotive engineers.

Class of service.		e per		rtime hour.	Basis of da	ay's work.
	1911 1912		1911	1912	1911	1912
Passenger Through freight Local freight Work and helper Ballast, gravel, circus trains, etc Yard— Madison and East St. Louis Toledo All other	4. 70 4. 60 4. 35 4. 70 4. 00 3. 90	\$4. 25 4. 75 5. 00 4. 75 4. 75 1 4.10 1 4.10	\$0.38 .47 .46 .435 .47 .40 .39 .37	\$0.70 .475 .50 .475 .475 .475	100 miles or less	100 miles or less. 100 miles or less; 10 hours or less. 100 miles or less. do. do. 10 hours or less. do.

<sup>1</sup> All switching service.

WHEELING & LAKE ERIE RAILROAD CO., WABASH-PITTSBURGH TER-MINAL RAILWAY CO., WEST SIDE BELT RAILROAD CO.

No increases in rates of pay to engineers in regularly assigned passenger service on this railroad were made by the arbitration board. On a mileage basis passenger engineers had their rates of pay advanced 11.8 per cent. The standard minimum rate per mile in through freight service was also increased 5.6 per cent by the award of the arbitration board, 25 cents per 100 miles or less being added to through freight rates in 1912, for local freight service.

In yard service, the rates paid per hour were in some instances in-

creased 1 cent, and in others 3 cents.

Rates of pay of locomotive engineers.

City of some	Rate	1010	1010	Basis of a	lay's work.	Over	time.
Class of service.	per—	1910	1912	1910	1912	1910	1912
Passenger <sup>1</sup>	Mile	2 \$0.038	\$0.0425	100 miles or less.	100 miles or	3 \$0.45	3\$0.50
Regularly assigned passen-	Month .	132.50	132, 50	1000	1033.		
ger. Through freight: 4 Standard minimum rate.	Mile	. 045	.0475	100 miles or less.	100 miles or less, 10 hours or less.	5, 045	5. 0475
Engines with cylinders: 20 by 26 inches or over Mallet or articulated compound engines.	do Day	.047	5, 25	do	100 miles or less, 10 hours or less.	5.047	5. 0525
Local freight: Small engine	Mile	.046	(6)		do	5.046	(6)
Engines with cylinders 21 by 30 or over.	do	. 048	(6)	less. do	do	5, 048	(6)
Mine, work and helper	do	. 044	(5)	do	do	5, 044	(7)
Yard: Toledo, Huron, Cleve- land, Canton, Mingo, Columbia, Brewster, and Roo's.	Hour	.40	.41	10 hours or less.	10 hours or less.	3, 40	3, 41
All other yards		.38		do	do	3, 38	3, 41
Watching engine Breal ing in engines		. 40 4. 25	. 46 4. 75	10 hours or less.	10 hours or less.		3, 0475

<sup>1</sup> Overtime on speed basis of 20 miles per hour.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the

award of the board of arbitration, effective May 1, 1912.

	Determin	1010	1010	Increase.		
Class of service.	Rate per—	1910	1912	Amount.	Per cent.	
Passenger Regularly assigned passenger Through freight: 2 Standard minimum rate, Yard:	Mile Month	1 \$0. 038 132. 50 .045	\$0.0425 132.50	\$0.0045 .00	11. 8 . 0 5. 6	
Toledo, Huron, Cleveland, Canton, Mingo, Columbia, Brewster, and Rook.	Hour	.40	. 41	. 01	2. 5	
All other yards	do	.38	. 41	.03	7.9	

<sup>&</sup>lt;sup>1</sup> For freight engines with cylinders 21 by 30 or larger, 4 cents a mile.

<sup>&</sup>lt;sup>2</sup> For freight engines with cylinders 21 by 30 or larger, 4 cents a mile.

<sup>3</sup> Per hour.

Overtime on speed basis of 10 miles per hour, actual minutes counted. All over 100 miles, pro rata.

<sup>6 25</sup> cents per 100 miles or less added for local freight service to through freight rates, according to class of engines. Miles over 100 paid for pro rata.

7 Through freight rates apply on all work, wreck, pusher or helper, mine runs or roustabout, circus trains, and to trains established for the exclusive purpose of handling milk; all according to class of engines. Overtime computed on minute basis.

<sup>&</sup>lt;sup>2</sup> 25 cents per 100 miles or less added for local freight service, to through freight rates, in 1912, according to class of engine.

# EFFECT OF APPLICATION OF AWARD OF ARBITRATION BOARD ON INDIVIDUAL RAILROADS.

No uniform basis for the payment of locomotive engineers has up to the present time been adopted in the territory east of the Ohio and north of the Potomac rivers. Some railroads classify their rates of pay according to the size of cylinders, others according to weight on drivers, still others according to the number of wheels and according to the trade name of the engines. Not until the year 1913 were the rates of pay to locomotive firemen in the eastern territory standardized according to weight on drive wheels, and the same basis of payment both to engineers and firemen in the West was not adopted until the year 1915. As a consequence it was impossible, with the printed working schedules as a basis, to make any comparative study as to how rates of pay to engineers and firemen were affected by awards of arbitration boards. Methods of wage payment were frequently changed by the application of the decision of arbitration boards.

Under these conditions it was decided to use as a basis of comparison of rates of pay the classification of locomotives required by the Interstate Commerce Commission. Up to the fiscal year 1915 this classification was uniformly used by the railroads in reporting to the commission. In the following comparisons the figures relative to the number of locomotives and their average weight on drivers (tons), prior to the fiscal year 1915, are based on information secured from pages 103 to 107 of the annual reports of the carriers to the Interstate Commerce Commission. In the form of annual report adopted for use in 1915 there were considerable changes made throughout and locomotive classification was furnished in a different manner by the carriers. Because of this variation it was necessary to request the railroad companies to furnish data on locomotive equipment that would be comparable with prior years.

After the information as to number and weight of locomotives in the various classifications was secured from the annual reports of the railroads to the Interstate Commerce Commission, printed forms were mailed to the companies to be filled out. Each sheet was divided into three similar sections, providing for single expansion, four-cylinder compound, and two-cylinder compound or cross-compound locomotives. The information requested from the carriers

was as follows:

(a) Class of service in which each locomotive was engaged.

(b) Number of locomotives of each class.

(c) Rates of pay per day of 100 miles or 10 hours or less to (1)

engineers, (2) firemen.

Because of the change in the 1915 reports, mentioned above, a special sheet for this year was prepared and sent to the railroad companies requesting, in addition to the other inquiries listed, the average weight on drivers (tons) of locomotives. The printed forms sent to the railroads were for the fiscal years prior and subsequent to any arbitration proceedings they were involved in, either with their engineers or firemen.

In the following derivative tables, rates of pay to locomotive engineers are shown prior and subsequent to the award of the arbitra-

tion board in eastern territory of November 2, 1913.

RAT	TTM:	ORE	87	OHIO	R. R.

Class.		mber.	weig dri (to	erage tht on vers ons).	hou	e per of 100 s or 10 rs or	Incr	ease.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	20	24	36	40				
Switching: First-class yards					\$4.15	\$4.15	\$0.00	0.0
Second-class yards. Class A3, OOO>	138	136	54	54	4.00	4.10	. 10	2.5
Switching:	190	130	04	94			**********	
First-class yards Second-class yards					4.15	4. 15	.00	2.5
Class A4, 0000>	26	6	90	68	2.00	1.10	.10	2.0
Switching: First-class yards					4.15	4. 15	.00	.0
Second-class yards	52	40	40		4.00	4. 10	.10	2.5
Class B3, OOOo>	52	46	49	49	4.45	4.75	.30	6.7
Freight. Class B4, 00000>	1,169	1, 183	83	83			•••••	
Freight: 173,000 and less than 274,000 pounds 140,000 to 173,000 pounds on drivers					4.85	4.85	.00	.0
140,000 to 173,000 pounds on drivers					4.70 4.60	4.75	.05	1.1
All other engines.  Class C2, OOoo>	186	169	35	35		4.75	. 15	3.3
Passangar	284	277	53	54	4.00	4. 25	. 25	6.3
Class C3, OOOoo> Passenger	201				4.00	4. 25	. 25	6.3
Freight Class E4, 000000>	161	322	109	111	4.10	4.85	.75	18.3
Class E4, 0000005 Freight. Class F2, 000005 Passenger.					5.00	5.00	.00	.0
Passenger	52	52	58	58	4.10	4. 25	.15	3.7
Class F3, oOOOoo> Passenger	75	105	81	81				
FOUR-CYLINDER COMPOUND LOCOMOTIVES.					4.25	4.25	.00	.0
Class A6, OOOOOO>	. 1	1	167	167				
Freight. Class 0000-0000>					5.40	5.40	.00	.0
Class 0000-0000> Freight	20	30	231	232	6.00	6.00	.00	.0
Class 0000-0000o>	1	1	155	155				
Switching.					4.50	5.40	.90	20.0
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.								
Class C3, OOOoo>	9		65					
Passenger					4.85			
BESSEME	R & I	AKE	ERIE	R. R				:
SINGLE-EXPANSION LOCOMOTIVES.	ĺ							
Class A3, 000>	13	13	69	69				
Switching					\$4.47	\$4.47	\$0.00	0.0
Class B3, OOOo> Switching	25	25	62	62	4.47	4. 47	.00	0.0
Through freight					5.00	5.00	.00	0.0
Local freight Regular passenger					5.00	5. 25 4. 25	. 25	5. 0
Regular passenger Excursion Class B4, 00000>	109	119	86	87		4.60		
Switching	109	119		01	4. 47	4. 47	.00	0.0
Through freightLocal freight					5. 00 5. 00	5. 00 5. 25	.00	0. 0 5. 0
Freight angines 112 and 114 tons					5.35	5. 35	.00	0.0
Class C2, OOoo>	15	10	37	44	4. 20	4. 25	.05	1. 2
Excursion		7	47	47		4. 60		.,
Class C2, O 0 0 o >			47	47	4. 47	4. 47	.00	0.0
Regular passenger. Excursion.					4. 20	4. 25 4. 60	. 05	1.2
rreight:							• • • • • • • • • • • • • • • • • • • •	
ŤhroughLocal					5. 00 5. 00	5. 00 5. 25	.00	0. 0 5. 0
Class F3, 000000>		4		72			. 20	
Regular passenger Excursion						4. 25 4. 60		
A						2, 50		

Rates paid to locomotive engineers before and after the arbitration of 1912 and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued. BOSTON & MAINE R R

BOSTON & MAINE R. R.											
Class.	Nur	nber.	weig dri	erage ht on vers ns).	day miles hou	e per of 100 s or 10 rs or ss.	Incr	ease.			
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.			
SINGLE-EXPANSION LOCOMOTIVES.											
Class A2, 00>	37	20	35	36	\$4.00	\$4.10	\$0.10	2.5			
Switching. Class A3, 000> Switching.	191	201	57	57	4.00	4. 10	.10	2.5			
Class B3, OOOo> Freight:	176	173	60	60							
ThroughLocal					4.30 4.30	4.75 5.00	.45	10. 5 16. 3			
Class B4, 0000o> Through freight	152	222	78	76	4.70	4.75	. 05	1.1			
Local freight. Class C2, OOoo>	336	304	36	34	4. 70	5.00	.30	6. 4			
Passenger. Class C3, OOOoo>	137	140	50	50	4.00	4. 25	. 25	6.3			
Passenger. Through freight.					4.00	4. 25	. 25	6.3 10.5			
Local freight. Class C4, OOOOoo> Through freight.	18	18	64	64	4. 30	5.00	.70	16. 3			
Local freight.  Class F2, 00000>	37	36	44	44	4.70	5. 00	.30	6. 4			
Passenger		71	73	73	4.10	4. 25	. 15	3.7			
Passenger Class G2, ooOO>	3	1	33	33	4.10	4. 25	. 15	3.7			
Passenger Class H3, 000000>	7	7	45	45	4.00	4. 25	. 25	6.3			
Passenger	5	5	100	100	4.00	4. 25	. 25	6.3			
Passenger Freight					4.70	4.75	.05	1. 1 1. 1			
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.											
Class B4, 0000o>	7	6	75	75			************				
Local freight			52		4.70 4.70	4.75 5.00	.05	1. 1 6. 4			
Local freight Class C3, OOOoo> Passenger Through freight		4	32	52	4.00 4.30	4. 25 4. 75	. 25 . 45	6.3 10.5			
Local freight					4.30	5.00	.70	16.3			
BUFFALO, ROCH	ESTE	R & I	PITTS	BURG	H R	Υ.					
SINGLE-EXPANSION LOCOMOTIVES.	1			·							
Class A3, 000>	7	6	63	67	e1 00	24 10	\$0.10	2.5			
Class B3, 000o>	2	2	44	44	\$4.00	\$4.10 4.10	.10	2.5			
Class B4, 0000o>	177	186	77	77	4.00	4.10	.10	2.5			
Freight	8	8	122	122	4.75	4.75	.00	.0			
Freight. Class C2, O Ooo>	6	5	34	35	4.95	5.00	. 05	1.0			
Passenger	15	15	51	52	4.00	4.25	. 25	6.3			
Passenger Freight					4.00 4.75	4.25 4.75	. 25	6.3			
Switching. Class C4, OOOOoo>	50	34	66	67	4.00	4.10	.10	2.5			
Freight Switching					4.75 4.00	4.75 4.75	.00	18.8			
Class E4, 000000>	7	28	109	109	4.75	5.00	. 25	5.3			
Class F2, 00 000>  Passenger  Class F3, 00 000>	15	15	49 82	51 83	4.00	4.25	. 25	6.3			
Passenger					4.00	4.25	. 25	6.3			

· Class.	Nun	Number.		Average weight on drivers (tons).		e per of 100 s or 10 rs or ss.	Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
ass B4, 0000o>	32	32	76	76				
Local freight					\$4.83	\$5.25	\$0.42	8.
Through freight					4.72	4.98	. 26	5.
Switching		3	37	37	4.00	4.10	.10	2.
ass C2, OOoo> Passenger			31	94	4.20	4.46	. 26	6.2
ass C4, OOOOoo>	4	4	48	48				
Local freight					4.83	5.25	.42	8.
Through freight Switching	••				$\frac{4.72}{4.00}$	4.98	.26	5.
ass 72, 00000>	5	5	45	45	4.00	4.10	.10	2.
Passenger					4.20	4.46	. 26	6.2
single-expansion locomotives.	6	6	60	60				
Switching					\$4.10	\$4.10	\$0.00	0.0
ass A4, 0000>		3		101	4.10	4.10	.00	
Switching ass B3, OOOo>	7	7	64	64	4.10	4.10	.00	.0
Treight					4.75	4.75	.00	,(
ass B4, 0000o>	30	43	63	74				
Through freight— Standard engine					4.75	4.75	.00	
Railroad classification F5 engine					4.75	5.00	.25	. ( 5. <del>8</del>
Local freight, railroad classification F	5							0.0
engine						5.25		
ass C2, OOoo> Passenger	14	-11	31	32	4.15	4.25	.10	2.4
ass C3, OOOoo>	7	7	52	52	1.10	1.20	.10	2.5
					4.15	4.25	.10	2.4
Passenger				31		1		
Passenger ass F2, 00000> Passenger	1	1	31		4.15	4.25	. 10	2.4

	3	1			1	1	1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	19	16	60	62			<b></b> .	
Switching:					1			
First-class yards						\$4.10	\$0.00	0.0
Second-class yards					4.10	4.10	.00	0.0
Class A4, 0000>		1		58				
Switching.	1	1	36	90		4.10		
Class B3, OOOo>		1	30	36	4.10	4.10	.00	0.0
Switching Class B4, 0000o>	34	27	74	80	4. 10	4. 10	.00	0.0
Freight:	01	21	1 1	00				***************************************
Through					4.75	4, 75	.00	0.0
Local					5.00	5.00	.00	0.0
Class C2, OOoo>	11	8	33	34				
Passenger					4. 25	4. 25	.00	0.0
Class C3, 00000>		22	45	45				
Passenger					4. 25	4. 25	.00	0.0
Freight		22	74	74	4. 75	4.75	.00	0.0
Class C4, OOOOoo>	22	22	/4	/4				
Through	ł	1			4, 75	4, 75	.00	0.0
Local					5.00	5.00	.00	0.0
Class E4,000000>		25	108	107				
Freight					5.00	5.00	.00	0.0
Class F2, 00 000>		2	47	47				
Passenger					4. 25	4. 25	.00	0.0
Class F3, 00000>		19	63	67				
Passenger					4. 25	4. 25	.00	0.0
	,	,					<u>'</u> -	

## CINCINNATI, HAMILTON & DAYTON RY.

CINCINNATI, HAMILION & DATTON WI.										
Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Incr	ease.		
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES.										
Class A3, 000> Switching: Cincinnati yards.	52	50	49	49	\$3.71	\$4.10	\$0, 39	10.5		
All other yards.  Class B3, OOOo>	13	13	43	43	3. 55	4. 10	. 55	15. 5		
Class 134, 000000>	55	55	82	82						
Freight Class (2, 0000>.	40	28	27	28	4.60	4. 75	. 15	3. 3		
Class C2, OO00> Passenger Class C3, OOO00>	81	81	50	50	3.80	4. 25	. 45	11.8		
Passenger Freight					3.80 4.60	4. 25 4. 75	. 45 . 15	11. 8 3. 3		
Class F3, oOOOoo>	5	5	69	69	3. 80	4. 25	. 45	11.8		
CINCINNA	TI N	ORTH	ERN	R. R	,	<u>'</u>				
SINGLE-EXPANSION LOCOMOTIVES.										
Class B3. 000o>	7	7	39	39						
Between Van Wert and Hudson and Van Wert and Lewisburg Between Lewisburg and Franklin					<b>\$4.</b> 35	\$5.00	\$0.65	14.9		
and Hudson and Jackson. Switching. Class B4, 00000>	5	10	85	84	4. 15 3. 50	4. 75 4. 10	.60	14. 5 17. 1		
Through freight. Class C2, OOo>	10	8	37	27	4.65	4. 75	.10	2. 2		
Passenger					3. 75	4. 25	. 50	13. 2		
Class C3, OOOoo> Local freight between Van Wert and Lewisburg and Van Wert and Hudson.	10	10	50	50	4, 35	5. 00	. 65	14.9		
	7 0				1100	0.00				
COA	L & (	JOKE	RY.				1			
SINGLE-EXPANSION LOCOMOTIVES.										
Class B4, 0000o> Passenger	20	24	69	71	\$4.15	\$5.00	\$0.85	20.5		
Switching. Class C2, OOoo>	7	7	27	27	4. 15	4.75	. 60	14.5		
Passenger		•••••	•••••		4. 50	4.50	.00	.0		
CHICAGO, TERRE HAUTE & SOUTHEASTERN RY.										
SINGLE-EXPANSION LOCOMOTIVES.										
Class A4, 0000>		2		82		\$4.10				
Class B3, OOOo>	12	12	56	56	\$3.50	4. 10	\$0.60	17. 1		
Class B4, 00000>	15	25	93	99	4.65	4.75	.10	2.2		
Freight Class C2, OO00> Passenger	12	10	40	41	3.65	4. 25	.60	16.4		
Class C3, OOOoo> Freight.	24	24	49	49	4. 25	4.75	.50	11.8		
						1				

#### CHICAGO, INDIANA & SOUTHERN R. R.

chicago, IND	IANA	. α ει	,01H	ERN.	к. к.			
Class.	Nur	Number.		Average weight on drivers (tons).		of 100 s or 10 urs or ss.	Inci	ease.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	33	33	71	71				
Switching	2	2	135	135	\$4.10	\$4.10	\$0.00	0.0
Switching. Class B4, OOOOo>	76	76	103	103	4.10	4. 10	.00	.0
Freight. Class C2, OOoo>	8	7	28	29	4.85	4.85	.00	.0
Passenger Freight					4. 25 4. 75	4. 25 4. 75	.00	.0
Class C3, OOOoo> Freight	25	27	57	57	4.85	4.85	.00	.0
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.					4.00	4.00	.00	.0
Class C3, OOOoo> Freight	2		56		4.85	!		
	}	1		1		1		
CLEVELAND, CINCINI	NATI,	CHIC	AGO .	& ST.	LOU	IS RY	•	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	1	1	31	31	\$4.10	94 10	\$0.00	0.0
Class A3, OOO> Switching.	164	182	64	66	4.10	4. 10	.00	
Class A5, OOOOO> Switching.	2	2	70	70		4.10		.0
Class B3. 0000>	45	31	43	43	4.10		.00	.0
Passenger Freight					4. 75	4. 25 4. 75	.00	0
Switching. Class B4, OOOOo> Freight.	321	320	100	98	4:10			
Class C2. OOoo>	561	67	32	32	4. 75	4. 75	.00	.0
Passenger Class C3, OOOoo>	100	115	58	56	4. 25	4. 25	00	.0
Passenger Freight	į				4. 25 4. 75	4. 25 4. 75	.00	.0
Switching. Class E4, 000000>		42		104	4.10	4.10	.00	.0
Class F2, oOOoo>	60	60	51	51		4.75		
Passenger Class F3, 000000>	45	45	73	73	4, 25	4, 25	.00	.0
Passenger				• • • • • •	4. 25	4. 25	.00	.0
DAYTO	ON &	UNIO	N R.	R.				
SINGLE-EXPANSION LOCOMOTIVES.								
Class C2, OOoo>	. 5	5	27	27	&5 UU	\$4, 25	\$1.25	41, 7
Passenger Class C3, OOOoo>	1	1	54	54	\$3.00			16.3
Local freight		*****	•••••	• • • • • • • • • • • • • • • • • • • •	4.30	5.00	.70	10.3

				Rat	e per			
Class.	Number.		Average weight on drivers (tons).		day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	1		31		£4.00			
Switching. Class A3, OOO>	41	44	75	64		24 10		
Switching. Class B3, OOOo>	32	27	50	50		34. 10	\$0.10	2
FreightClass B4, 0000o>	265	286	86	87	4. 25	4.75	. 50	11.
Freight— 164,000 pounds on drivers					4.65	4.85	. 20	4.
223,000 pounds on drivers		51	43	43	4.80	4.85	. 05	1.
Passenger Class C3, OOOoo>		44	67	67	3.90	4.25	. 35	9.
Passenger		1	16	16	3.90	4.25	. 35	9.
Passenger					3.90	4. 25	.35	9.
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class A8, OOOOOOOO (Mallet)	10	13	227	229	6. 50	6.50	.00	0.
DELAMARETA	OTT A TO	Y A BIBI	A 0. To	WEGE	EDM	D D	1	
DELAWARE, LA	CKAV	VAININ	Acci	WEST	ERN	R. R.	1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	1	2	35	40	\$4.00	\$4.10	\$0.10	2.
Class A3, 000>	125	133	65	65				
Switching	9	21	103	102	4.00	4. 10	.10	2.
Switching	138	119	61	63	4. 50	4. 50	.00	
Through freight. Way freight or pick-up. Class B4, 00000>	1				4. 50 4. 75	4. 75 5. 00	. 25	5. 5.
Class B4, OOOOo>	260	259	82	82	4, 80	4. 80	.00	
Way freight or pick-upClass C2, OOoo>		101	46	46	4.90	5.05	.15	3.
Passenger.		57	67	72	4.00	4. 25	. 25	6.
Passenger					4.10	4. 25	.15	3.
Class C4, OOOOoo> Through freight	20	20	79	79	4. 80	4. 80	.00	
Way freight or pick-up		27		118	4.90	5.05	.15	3.
Through freight		1				4. 95 5. 20		
Way freight or pick-up		1	86	92	4.10	4. 25	.15	3.
Through freight Way freight or pick-up.  Class H1, 0000>						4. 80 5. 05		
Class H1, 0000>		1		19		4. 25		
Inspection						4. 20		
	LED	0 & I	RONT	ON R	. R.			
DETROIT, TO								
DETROIT, TO								
SINGLE-EXPANSION LOCOMOTIVES. Class A2, OO>	1	1	26	26	\$4.10	\$4 10	\$0.00	
single-expansion locomotives.  Class A2, OO>		1 3	26 50	26	\$4. 10		\$0.00	0.
SINGLE-EXPANSION LOCOMOTIVES.  Class A2, OO>	1				\$4. 10 4. 10 4. 10	\$4. 10 4. 10 4. 10	\$0.00	0.

#### DETROIT, TODEDO & IRONTON R. R.-Continued.

Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Increase.	
1912	1914	1912	1914	1912	1914	Amount.	Per cent.
20	25	100	09				
				5.00	5.00	\$0.00 .00	0.0
.] 8	9	28	28	4.75	4.75	.00	.0
13	9	50	54	4. 10	4. 10	.00	.0
	39 8 13	1912 1914 	Number. weig dri (to:  1912 1914 1912  39 35 132  8 9 28  13 9 50	Number.         weight on drivers (tons).           1912         1914         1912         1914           39         35         132         82           8         9         28         28           13         9         50         54	Number.	Number.	Number.         Average weight on drivers (tons).         day of 100 miles or 10 hours or 10 hour

## DUNKIRK, ALLEGHENY VALLEY & PITTSBURGH RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Class B3, OOOo>	2	2	46	49	\$4.25	e4 95	\$0.00	
Freight					4.75		.00	0.0
Class C3, OOOoo>	9	9	48	48				
PassengerFreight					4. 25	4.25	.00	.0
Freight					4.75	4.75	.00	.0

#### ERIE R. R.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	150	128	64	65				
Switching-	1			ł				
150,000 pounds or over on drivers					\$4.05	\$4. 10	\$0.05	1.2
Less than 150,000 pounds on drivers					3.90	4. 10	.20	5. 1
Class B3, 000o>	19	20		47				
Suburban passenger					4.15	4.25	. 10	2.4
Other passenger					4.00	4.25	. 25	6.3
Freight					4.55	4.75	.20	4.4
Switching					3.90	4. 10	.20	5. 1
Switching. Class B4, 00000>	755	618	80	80				
Passenger						4.25		
Freight—		1						
Över 150,000 pounds on drivers					4.70	4.75	. 05	1.1
Over 150,000 pounds on drivers Less than 150,000 pounds on drivers					4.55	4.75	.20	4.4
Switching-		ł				1		
Over 150,000 pounds on drivers					4.05	4. 10	.05	1.2
Less than 150,000 pounds on drivers					3.90	4.10	. 20	5.1
Class B5, 000000	. 6	6	87	87				
Switching. Class C2, OOoo>					4.05	4. 10	. 05	1.2
Class C2, OOoo>	82	74	38	38				
Suburban passenger					4. 15	4.25	. 10	2.4
All other passenger					4.00	4.25	. 25	6.3
Freight						4.75		
Switching. Class C3, OOOoo>					3.90	4. 10	. 20	5. 1
Class C3, OOOoo>	198	170	59	59				
Suburban passenger					4.15	4.25	. 10	2.4
All other passenger					4.00	4.25	. 25	6.3
Freight					4.55	4.75	. 20	4.4
Switching					3.90	4. 10	. 20	5. 1
Class E4, 000000>	. 35	155	118	118				
Freight					4.70	5. 15	. 45	9.6
Freight. Class F2, oOOoo>	55	57	42	42				
Suburban passenger					4. 15	4.25	. 10	2.4
All other passenger					4.00	4.25	.25	3.6
Freight						4.75		

ERIE R. R.—Continued.

ERIE R. R.—Continued.										
Class.	Nun	Number.		Average weight on drivers (tons).		e per of 100 or 10 rs or	Incr	eas <b>e.</b>		
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES—contd.										
Class F3, 000000> Passenger Freight	59	81	75	82	\$4. 10	\$4.25 4.75	<b>\$</b> 0. <b>1</b> 5	3.7		
Class H2, 00000>	1		33		3.90					
Class F1, oOoo>	1	1	9	9	4.00	4.25	.25	6.3		
FOUR-CYLINDER COMPOUND LOCOMOTIVES.	1	1	39	39						
Class C2, OOoo> Suburban passenger All other passenger					4. 15 4. 00	4. 25 4. 25	.10 .25	2. 4 6. 3		
Freight. Switching.	10	10	77	77	3.90	4.75 4.10	.20	5.1		
Suburban passenger All other passenger. Freight Switching.					4. 15 4. 00 4. 55	4. 25 4. 25 4. 75	.10 .25 .20	2. 4 6. 3 4. 4		
Class F2. 00000>	3	1	57	57	3.90	4. 10	.20	5. 1		
Suburban passenger. All other passenger. Freight					4. 15 4. 00	4. 25 4. 25 4. 75	. 10 . 25	2. 4 6. 3		
Class A8, 00000000> Pusher Class B7, 00000000>	3	3	205	205	6.00	6.00	.00	.0		
Pusher					5. 50	5. 50	.00	.0		
GRAND RA	PIDS	& IN	DIAN	A RY	7.					
SINGLE-EXPANSION LOCOMOTIVES.										
Class A3, 000>	3	8	72	72	\$4.00	\$4,10	\$0.10	0.5		
First-class yards. Second-class yards Class B3, 0000>	6	6	72	72	3.90	4.10	. 20	2. 5 5. 1		
Through freight: Grand Rapids to Cadillac: Grand					4. 60					
Rapids to Muskegon Cadillac to Mackinaw City; Traverse City to Walton Junction					4.88	4. 88 5. 05	.00	.0		
Local freight: Grand Rapids to Cadillac: Grand			*****		5. 05		.00			
Rapids to Muskegon Cadillac to Mackinaw City, Traverse City to Walton Junction					4.60	5. 13	.53	11. 5 15. 2		
Class B4, 00000> Switching: First-class yards	46	46	62	68	4.00	4.10	.10	2.5		
Second-class yards					3.90	4.10	.20	5.1		
Grand Rapids to Cadillac, Grand Rapids to Muskegon Cadillac to Mackinaw City, Traverse	•••••				4. 88	4. 88	.00	.0		
Local freight:  Grand Rapids to Cadillac Grand		•••••	••••		5. 05	5.05	.00	.0		
Rapids to Muskegon Cadillac to Mackinaw City, Traverse City to Walton Junction					4.60	5. 13	.53	11. 5 15. 2		
Class C2, OOoo>	11	11	30	31	4.60					
Local freight	11	11	30	31	4.60	4. 25	.25	6.3		

## GRAND RAPIDS & INDIANA RY .- Continued.

CHAIN MATTER & INDIANA INT.—Continuod.										
Class.	Nun	Number. wei		Average weight on drivers (tons).		e per of 100 s or 10 rs or	Increase.			
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES—contd.			*.							
Class C3, OOOoo>	26	26	56	56	\$4.00	\$4. 25	\$0, 25	6.3		
Through freight: Grand Rapids to Cadillac, Grand Rapids to Muskegon Cadillac to Mackinaw City, Traverse					4. 88	4. 88	.00	.0		
Cadillac to Mackinaw City, Traverse City to Walton Junction Local freight:					5. 05	5. 05	.00	.0		
Grand Rapids to Cadillac, Grand Rapids to Muskegon Cadillac to Mackinaw City, Traverse City to Walton Junction					4.60	5. 13	. 53	11.5		
City to Walton JunctionLocal freight					4. 60 4. 60	5, 30	.70	15. 2		
HOCK	ING V	ALLI	EY R	Υ.	<u> </u>		l			
SINGLE-EXPANSION LOCOMOTIVES.								-		
Class A3, 000>	34	34	60	60	\$4,00	\$4.10	\$0.10	2.5		
Class B3, OOOo>	1		48		4, 60					
Class B4, 0000o> Switching	93	92	79	79	4, 00	4.10	.10	2, 5		
Freight:					4. 75	4. 75	.00	.0		
Large consolidation engines	1#	10	45		4, 60	4. 75	.15	3.3		
Passenger	19		45	45	3, 65	4, 25	. 60	16.4		
Class C3, OOOoo> Passenger	3	7	71	71	3.65	4. 25	. 60	16, 4		
Class E4, 000000>		11		122		4.10				
Engines over 20-inch cylinders  Large consolidation engines  Class C2, OOoo>						4. 75				
INDIANA		1	BELT	R. R.		J				
SINGLE-EXPANSION LOCOMOTIVES.										
Class A3, 000>		24	61	84		*****				
Switching. Class B3, OOOo> Switching.	5	5	65	65	\$4. 10 4. 10	4. 75	\$0.00	0.0		
INDIANAPOLIS UNION RY.										
SINGLE-EXPANSION LOCOMOTIVES.										
Class A3, 000>	21	21	70	70	\$3.85	\$4.50	\$0.65	16.9		
Dwitting					ψυ. συ	42.00	φυ. 00	10.9		

KANAWHA & MICHIGAN RY.

KANAWI	#A &	MICH	IGAN	RY.				
Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Incr	ease.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	8	8	62	62	\$4.00	\$4. 10	\$0.10	2.5
Freight.	11	2	45	46	4. 60	4. 75	. 15	3.3
Class B4, 0000o> Freight:	36	46	75	73				
100,000 to 170,000 pounds on drivers 200,000 to 250,000 pounds on drivers					4. 60 4. 75	4. 75 4. 75	.15	3.3
Class C2. O(000> Passenger	8	10	39	43	3.65	4. 25	.60	16.4
Class E4, 000000>	3	5	85	83				
Mine runs.		• • • • • • • • • • • • • • • • • • • •			4.75	5. 25	. 50	10. 5
LAKE ER	IE &	WEST	ERN	R. R.				
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	21	26	58	61				
Switching:	21	20	00	01	\$4. 10	\$4. 10	\$0.00	0.0
Over 140,000 pounds on drivers Less than 140,000 pounds on drivers					4. 10	4. 10	.00	.0
Class B3, OOOo>	40	39	46	46	4. 75	4. 75	.00	.0
Class B4, 0000o> Freight	45	45	87	86	4. 75	4. 75	.00	.0
Class C2, O()oo> Passenger	27	26	40	41	4. 25	4. 25	.00	.0
Class C3, OOOoo> Passenger.	12	14	42	45	4. 25	4. 25	.00	.0
					<u> </u>	<u> </u>		
LAKE ERIE, AL	LIAN	CE &	WHE	ELIN	G RY		1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class B4, OOOOo> Freight	19		. 98		\$4.85			
LEHIO	) TT 37.4	TTES	7 D 1			1	1	
LEHIO	rH V P	VIDE:	I IV. 1	I.	1	1	1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	1	1	48	48	\$3.50	\$4.10	\$0.60	17. 2
Class A3, OOO>	59	67	47	50	4.00	4. 10	. 10	2.5
Class A4, 0000> Switching.	54	69	83	83	4.00	4. 10	.10	2.5
Class B3, 0000>	19	11	58	69			. 25	5. 6
Freight. Switching. Class B4, 00000>					4. 50 4. 00	4.75 4.10	. 25	2. 5
r reight	261	269	77	79	4.75	4.75	.00	.0
Switching. Class C2, OOoo>	72	56	36	36	4.00	4. 10	. 10	2.5
Passenger Freight					4.00 4.50	4. 25 4. 75	.25	6.3 5.6
Switching.	298	281	64	65	4.00	4. 10	.10	5. 6 2. 5
Class C3, OOOoo> Passenger	298	201			4. 10	4. 25	. 15	3.7
Freight. Switching					4.65	4. 75 4. 10	.10	2. 2 2. 5

## LEHIGH VALLEY R. R.-Continued.

SINGLE-EXPANSION LOCOMOTIVES—continued.   Class C4, OOOOoo>	DESIGN VALUE IV. IV.—Continued,									
SINGLE-EXPANSION LOCOMOTIVES—continued.   Class C4, OOOOoo>   34   13   47   52	Class.	Nui	mber.	weig dri	weight on drivers		rs or 10	Ine	rease.	
Class C4, OOOOoo>   34   13   47   52		1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
Freight	SINGLE-EXPANSION LOCOMOTIVES—continued.									
Class E3, 00000>	Freight		13	47	52				5. 6 2. 5	
Tright   177,610 pounds on drivers	Class E3, 00000> Passenger	1								
Over 177,610 pounds on drivers	Freight:	4/	114	89	104	4. 75	4, 75	.00	.0	
Freight   Switching   Switching   Switching   First-class yards   Switching   First-class yards   Switching   First-class yards   Second-class yards   Switching	Over 177,610 pounds on drivers Class F2, oOOoo>	39	39	47	47		5.00			
LAKE SHORE & MICHIGAN SOUTHERN RY.   SINGLE-EXPANSION LOCOMOTIVES.	Passenger Freight Switching					4.00	4.75	.25	6.3	
LAKE SHORE & MICHIGAN SOUTHERN RY.   SINGLE-EXPANSION LOCOMOTIVES.	Class F3, 000000> Passenger	17	26			4. 10		.15	3.7	
SINGLE-EXPANSION LOCOMOTIVES.   Class A3, OOO   258   235   69   72	Class, 00000> Passenger		1	13	13	4.00	4. 25	. 25	6.3	
Class A3, OOO>	LAKE SHORE &	MICE	IIGAN	SOU	THE	RN RY	ζ,	' /	-	
Switching:   First-class yards	SINGLE-EXPANSION LOCOMOTIVES.									
First-class yards	Switching:		235	69	72					
over       4.85       4.85       .00         Local freight, cylinders 20 inches and over       5.10       5.10       .00         Switch runs, cylinders 20 inches and over       5.00       5.00       .00         Class C2, O Ooo>       14       13       35       35         Passenger       4.25       4.25       4.25       .00         Class C3, O O Ooo>       99       75       48       51         Passenger       4.25       4.25       4.25       .00						4.10	4.10	.00	0.0	
over       4.85       4.85       .00         Local freight, cylinders 20 inches and over       5.10       5.10       .00         Switch runs, cylinders 20 inches and over       5.00       5.00       .00         Class C2, O Ooo>       14       13       35       35         Passenger       4.25       4.25       4.25       .00         Class C3, O O Ooo>       99       75       48       51         Passenger       4.25       4.25       4.25       .00	Class A4, 0000> Switching		20		120	4.10		.00	.0	
over       4.85       4.85       .00         Local freight, cylinders 20 inches and over       5.10       5.10       .00         Switch runs, cylinders 20 inches and over       5.00       5.00       .00         Class C2, O Ooo>       14       13       35       35         Passenger       4.25       4.25       4.25       .00         Class C3, O O Ooo>       99       75       48       51         Passenger       4.25       4.25       4.25       .00	Class A5, 00000> Switching, all yards	8	8	135		4.10		.00	.0	
Local freight, cylinders 20 inches and over		421	376	94	93	A 85		00	.0	
Class C2, OOoo>	Local freight, cylinders 20 inches and over. Switch runs, cylinders 20 inches and over.					5. 10	5.10	.00	.0	
Passenger 4.25 4.25 .00 .	Class C2, 0000>	14				4. 25	4. 25	.00	.0	
	Passenger					4. 25	4. 25	.00	.0	
Under 20-inch cylinders 4.75 .00 .	Over 20-inch cylinders. Under 20-inch cylinders.				•••••				.0	
Under 20-inch cylinders 5,00 5,00 .00 .00	Over 20-inch cylinders Under 20-inch cylinders					5.00	5.00	.00	.0	
Class E3, 0000o> 73 77 73 75	Switch runs. Class E3, 00000>	73	77		75				.0	
Class £4, 000000> 69 116 4.85	Class E4, 000000> Through freight.					1. 20	4.85			
Local freight. 5.10	Local freight Class F2, 00 Ooo>	10	10	46	47	4 95			.0	
Class F3, 000000> 105   110   85   85   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   110   11	Class F3, 000000> Passenger	105	110	85	85				.0	
FOUR-CYLINDER COMPOUND LOCOMOTIVES.										
Class 000-0000>         3         233         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00         5.00			3		233		5.00			

JOIN	O LOL	311112	10, 10,	'				
Class.		Number.		Average weight on drivers (tons)		e per of 100 s or 10 rs or	Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	28	30	54	55	\$4.10	\$4.10	\$0.00	0.0
Freight Class B4, OOOOo>	16	16	61	60		5.00		
Freight		88	54	55	5. 00 4. 75	5.00	.00	.0
Passenger Freight					4. 25 5. 00	4. 25 5. 00	.00	.0
Work. Class C3, OOOoo>.	40	43	60	61	4.75	4.75	.00	.0
Passenger Freight Work					4. 25 5. 00 4. 75	4. 25 5. 00 4. 75	.00	.0
Class F2, 00000>	4	4	47	47	4. 25	4. 25	.00	.0
Freight. Class G2, ooOO>	1	1	20	20	5. 00			
Switching					3.10	3.20	.10	3.2

#### MAINE CENTRAL R. R.

		1	-		1			-
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	. 17	17	54	54	20.00	04.10		
Switching Class B3, OOOo>	40	43	53	54	\$3.80	\$4. 10	\$0.30	7.9
Passenger	40	45	93	34	4.00	4. 25	. 25	6.3
Through freight:					2.00	1. 20	. 20	0.5
100 miles or less					4.25	4, 75	. 50	11.8
Over 100 miles and less than 120 miles.						4.75	.25	5, 6
Local freight:			1					
100 miles or less					4.60	5.00	.40	8.7
Over 100 miles and less than 120 miles.						5.00	.15	3.1
Switching.					4.00	4. 10	.10	2.5
Class B4, 0000o> Through freight:	16	28	85	86				
100 miles or less					4 50	4. 75	. 25	5, 6
100 miles or less. Over 100 miles and less than 120 miles.					4. 50	4. 75	.00	0.0
Local freight:				*****	2.10	7. 10	.00	0.0
100 miles or less					4, 85	5,00	. 15	3, 1
Over 100 miles and less than 120 miles	1			1	5. 10	5.10	.00	0.0
Class C2, O Ooo>	62	51	34	35				
Passenger					4.00	4.25	. 25	6.3
Switching					4.00	4.10	.10	2.5
Through freight:					4.05	4 77	F0.	44.0
100 miles or less. Over 100 miles and less than 120 miles.					4. 25	4. 75	.50	11.8
Local freight:					4. 50	4. 75	. 25	<b>5.</b> 6
100 miles or less					4, 60	5,00	. 40	8.7
Over 100 miles and less than 120 miles. Class C3, OOOoo> Passenger					4.85	5,00	.15	3. 1
Class C3, 00000>	58	56	64	65		0.00		0.1
Passenger					4.00	4.25	.25	6.3
Switching					4.00	4.10	.10	2.5
Through freight:								
Over 100 miles and less than 120 miles.					4. 25	4.75	.50	11.8
Local freight:					4.50	4.75	. 25	5.6
					4, 60	5,00	. 40	8. 7
Over 100 miles and less than 120 miles					4.85		.15	3.1
Over 100 miles and less than 120 miles. Class E3, 00000>	1	1	42	42	1.00			, 0.1
Switching					3, 80		.30	7.9
Class E4, 0000000		3		107				
Through freight	1 1							
Local freight						5.00		
Local freight. Class F3, 000000>	10	16	70	71	*****	4 05		••••••
rassenger			01	01	4.00	4. 25	. 25	6.3
Class G2, 0000> Switching	1	1	31	31	3 80	4.10	.30	7.9
Our Mittel	1 1				0.00	4.10	. 30	7.9

#### MAINE CENTRAL R. R.-Continued.

Class.	Number.		Average weight on drivers (tons)		Rate per day of 100 miles or 10 hours or less		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES. Class B3, OOOo>	1	1	55	55				
Thróugh freight: 100 miles or less Over 100 miles and less than 120 miles. Local freight: 100 miles or less					\$4. 25 4. 50 4. 60	\$4.75 4.75 5.00	\$0.50 .25	11.8 5.6
Over 100 miles and less than 120 miles. Class E6, 00000000 Mallet Freight:	4	4	131	131	4. 85	5. 75	1. 25	8.7 3.1 27.8
ThroughLocal					4.85	6.00	1. 15	23.7

#### MICHIGAN CENTRAL R. R.

SINGLE-EXPANSION LOCOMOTIVES.								
SINGLE-EXPANSION LOCOMOTIVES.					1			
Class A2, 00>	. 10		30		ļ			· · · · ·
Switching:								
First-class yards					\$4.10			
Second-class yards					4,00			
Third-class yards					3, 90			
Class A3, 000>	159	206	65	68				
Switching:				00				
First-class yards					4.10	\$4.10	\$0.00	0.0
Second-class yards					4, 00	4. 10	. 10	2, 5
Third-class yards					3.90	4. 10	. 20	5. 1
Third-class yards	. 3	4	137	136		1.20		
Switching.				100	4.00	4. 10	. 10	2.5
Class B3, 00000>	27	27	56	56		1, 10		
Through freight:			"	00				
Under 19 by 24 inch cylinders					4. 75	4. 75	.00	0.0
Over 19 by 24 inch cylinders					4, 85	4. 10		
Local freight:								
Under 19 by 24 inch cylinders					5, 35	5, 35	.00	0.0
Over 19 by 24 inch cylinders					5. 45	0.00		
Class B4, 000000>	. 86	101	106	106	0. 10			
Through freight.		101	200	100	4.85	4, 85	.00	0.0
Local freight					5. 45	5. 45	.00	0.0
Class C2 0000>	66	46	29	29	0. 10	0. 10		
Class C2, OOoo> Passenger	•	1		20	4. 15	4. 25	. 10	2.4
Through freight					4. 75	4. 75	.00	0.0
Local freight					5.35	5. 35	.00	0,0
Local freight. Class C3, OOOoo>	126	125	54	54	0.00	0.00		
Passenger				01	4.15	4, 25	. 10	2.4
Through freight:						1.20	,	
Under 19 by 24 inch cylinders					4. 75	4, 75	.00	0.0
Over 19 by 24 inch cylinders					4. 85	4. 85	.00	0, 0
Local freight:					-	1.00	1	
Under 10 by 24 inch cylinders					5, 35	5, 35	.00	0.0
Over 19 by 24 inch cylinders					5. 45	5, 45	.00	0.0
Class E4, 000000>		35		122		0.10		
Through freight				122		4. 85		
Local freight						5. 45		
Class F2, oOOoo>	28	28	48	48		0. 10		
Passenger	-	-		10	4. 15	4. 25	. 10	2.4
Class F3, 0000000>	. 60	78	76	77	10.20	1. 20		
Passenger					4. 15	4.25	. 10	2.4
						31.20		· ·
TWO-CYLINDER COMPOUND OR CROSS-								
COMPOUND LOCOMOTIVES.								
		1						
Class B4, 0000o>	. 99	99	85	85			,	
Through freight					4.85	4.85	.00	0.0
Local freight					5. 45	5. 45	.00	0.0
	1	,						

## NEW YORK CENTRAL & HUDSON RIVER R. R.

Class.	Nun	aber.	weig	rage ht on vers ns).	Rate per day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	3		35					
Switching. Class A3, OOO >	3763	439	72	76	\$4.10			
Switching. Class A5, OOOOO>	5	4	134	135	4. 10	\$4.10	\$0.00	0.0
Switching. Class B3, (1000>	322	300	58	58	4. 10	4. 10	.00	.0
Freight. Class B4, 00000>	561	390	94	92	4. 75	4.75	.00	.0
Freight Switching					4.85	4.85 4.10	.00	.0
Class C1, Ooo'> Passenger.	4	4	12	12	4. 15	4. 25	.10	2.4
Class C2, OOoo> Passenger	178	165	39	39	4. 15	4.25	.10	2.4
Freight. Class C3, OOOoo>	184	186	75	75	4. 75	4. 75	.00	.0
Passenger Freight.					4. 12 4. 85	4. 25 4. 85	.13	3.2
Class C4, OOOOoo>	43	16	84	61				
G2, G3, G4, and G5 engines.	<u>.</u> .				4.85 4.75	4.75	.00	.0
Class E3, 00000> Freight.	8		83		4.75			
Class E4, 000000> Freight	222	263		107		4.85		
Class F2, 00000> Passenger. Class F3, 00000>		222	53	53	4. 15	4. 25	. 10	2.4
Passenger	332	443	83	85	4. 15	4. 25	. 10	2.4
Freight. Class H2, 00 O O o > Passenger.	8	11	30	31	4. 75	4.85	.10	2.1
Class K3, 000 O O O O	18	18	68	68	4. 15	4. 25	.10	2.4
Passenger.					4.18	4. 25	.07	1.7
FOUR-CYLINDER COMPOUND LOCOMOTIVES.  Class F2, 00000>	0							
Passenger	226		55		4. 15			
Class E6, 0000-0000>	26	30	150	150	5.85	5.85	.00	.0
Switching.		1		181		5.85		
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.								
Class A3, 000>	3		59					
Switching. Class B4, 0000o>	43	43	83	88	4.11			
Freight					4.85	4.85	.00	.0
NEW YORK, C	HICA	GO &	ST. L	ouis	R. R.			
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	49	55	52	54				
Switching. Class B3, 0000>	19	17	43	43	\$3.87	\$4.10	\$0.23	5.9
Freight. Class B4, 00000>	54	60	72	73	4.81	4.87	.06	1.2
Freight. Class C2, OO00>	21	19	32	33	4.81	4.87	.06	1.2
Class C3, OOO00>	105	107	48	50	4. 10	4. 25	. 15	3.7
Freight. Passenger					4.81 4.10	4.87	.06	1.2 3.7

### NEW YORK, NEW HAVEN & HARTFORD R. R.

NEW YORK, NEW	HAV	EN 00	HAD		ND IV.	10.		
Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	20	16	35	35	\$4.10	\$4.25	\$0.15	3.7
Class A3, OOO>	168	199	58	61			• • • • • • • • • • • • • • • • • • • •	••••
10-hour yards 8-hour yards Class B3, 0000>					4. 10 3. 50	4. 10 3. 50	.00	0. 0 0. 0
Class B3, OOOo>  Local freight	357	349	60	60	4. 65 4. 65	5.00 4.75	.35 .10	7. 5 2. 2
Local freight Through freight Class B4, 0000o> Local freight Through freight. Through freight.	39	35	66	69	4. 65	5.00	.35	7.5
Class C2, O 000 >	410	390	33	34	4.65	4.75	. 10	2. 2
Passenger Class C3, OOOoo>	104	106	51	50	4.10	4. 25	. 15	3.7
Passenger Through freight Local freight					4. 10 4. 65 4. 65	4. 25 4. 75 5. 00	. 15 . 10 . 35	3.7 2.2 7.5
Passenger	12	12	53	53	4. 10	4. 25	.15	3.7
Class F3, 000000>	32	88	71	75	4. 10	4. 25	.15	3.7
Passenger	7	3	34	36	4.10	4. 25	.15	3.7
FOUR-CYLINDER COMPOUND LOCOMOTIVES.						·		
Class C3, OOOoo> Passenger	2		60		4.10			
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.								
Class A3, OOO>	17	6	68	68				
10-hour yards 8-hour yards					4. 10 3. 50	4. 10 3. 50	.00	0.0 0.0
NEW YORK, PHIL	ADEI	PHIA	& N	ORFC	LK R	l. R.	1	ı
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	5	5	68	68				
Switching: 110,785 pounds on drivers—					\$4.25	\$4.35	\$0.10	2.4
Cape Charles					4. 10	4. 10	.00	0.0
Port Norfolk. Cape Charles. 135,820 pounds on drivers— Port Norfolk. Cape Charles.					4. 25 4. 10	4.35 4.10	.10	2. 4 0. 0
144,100 pounds on drivers— Port Norfolk Cape Charles					4. 25	4.35 4.35	.10	2. 4 0. 0
Class B4, 00000>	4	6	90	82	5.33	5.33	.00	0.0
Class C2, OO00>  Passenger  Class C3, OO000>	3	2	29	30	4.72	4.72	.00	0.0
Class C3, O O O 00>		20	53	54 45	5.33	5.33	.00	0.0
Passenger				7.0	4.72	4.72	.00	0.0

Rates paid to locomotive engineers before and after the arbitration of 1912 and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued.

## NEW YORK, SUSQUEHANNA & WESTERN R. R.

Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>		3		71		\$4.10		
Class 133. (1)(1)(0)(0)	19	20	49	55				
Freight. Switching.					\$4.00 3.45	4.75 4.10	\$0.75 .55	18. 8 15. 9
Class B4, OOOOo> Freight	30	38	65	65	4.00	4.75	.75	18.8
Switching. Class C2, OOoo>.	13	14	40	39	3, 45	4. 10	.65	18.8
Passenger				57	3.90	4. 25	.35	9.0
Class (3, 00000> Passenger	4	10	56	57	3.90	4. 25	.35	9.0
	<u> </u>						ļ	
NEW JERSE	EY & :	NEW	YORI	K R. I	R.			
SINGLE-EXPANSION LOCOMOTIVES.								
Class B4, 00000>	2	. 2	76	66	24 77			
Freight. Class C3. OOOoo>	12	10	58	59	\$4.55	\$4.75	\$0. 20	4. 4
Passenger Class F2, oOOoo>	3	2	39	39	4.00	4. 25	. 25	6.3
Passenger					4.00	4. 25	. 25	6.3
NEW YORK, O SINGLE-EXPANSION LOCOMOTIVES.	NTAB	10 &	WES	FERN	RY.			~
Class A3, 000>	7	7	75	74				
Switching, 156,000 pounds on drivers Class B3, OOOo>	79	77	64	64	\$4.00	\$4.10	\$0.10	2.5
Passenger Switching					4.05 4.00	4, 25 4, 10	.20	4.9 2.5
Freight	*****				4. 50	4. 75	.10 .25	2.0
Class B4, OOOOo>Freight:	100	99	73	73				5. 6
101,000 and 115,000 pounds on drivers.							• • • • • • • • • •	•••••
178,000 pounds and over on drivers				• • • • •	4. 50 4. 65	4. 75		5.6
178,000 pounds and over on drivers Switching.	94	94			4.50 4.65 4.00	4. 75 4. 75 4. 10	• • • • • • • • • •	•••••
178,000 pounds and over on drivers Switching Class C2, OOoo> Passenger	24	24	39	39	4.65	4.75	. 25	5. 6
178,000 pounds and over on drivers Switching	24		39 67	39	4.65 4.00	4. 75 4. 10	. 25 . 10 . 10	5. 6 2. 2 2. 5
178,000 pounds and over on drivers. Switching Class C2, OOoo> Passenger Class C3, OOOoo> Passenger.		24	67		4. 65 4. 00 4. 05	4. 75 4. 10 4. 25	. 25 . 10 . 10	5. 6 2. 2 2. 5 4. 9
178,000 pounds and over on drivers. Switching Class C2, OOoo> Passenger Class C3, OOOoo> Passenger Passenger	4	24	67		4. 65 4. 00 4. 05	4. 75 4. 10 4. 25	. 25 . 10 . 10	5. 6 2. 2 2. 5 4. 9
178,000 pounds and over on drivers. Switching. Class C2, OOoo> Passenger. Class C3, OOOoo> Passenger.  Pensenger.  PENSENGER.	NSYL	24	67 A CO.	67	4. 65 4. 00 4. 05	4. 75 4. 10 4. 25	. 25 . 10 . 10	5. 6 2. 2 2. 5 4. 9
178,000 pounds and over on drivers. Switching. Class C2, OOoo> Passenger. Class C3, OOOoo> Passenger.  PEN: SINGLE-EXPANSION LOCOMOTIVES. Class A2, OO> Switching.	NSYL	24	67 A CO.		4. 65 4. 00 4. 05 4. 05	4. 75 4. 10 4. 25 4. 25	. 25 .10 .10 .20	5. 6 2. 2 2. 5 4. 9
178,000 pounds and over on drivers. Switching Class C2, OOoo> Passenger. Class C3, OOOoo> Passenger.  Pen.  SINGLE-EXPANSION LOCOMOTIVES.  Class A2, OO> Switching. Class A3, OOO>	NSYL	24 4 VANL	67 A CO.	67	4. 65 4. 00 4. 05 4. 05	4. 75 4. 10 4. 25 4. 25 \$4. 10	. 25 .10 .10 .20 .20	5. 6 2. 2 2. 5 4. 9 4. 9
178,000 pounds and over on drivers. Switching. Class C2, OOoo> Passenger. Class C3, OOOoo> Passenger.  PEN.  SINGLE-EXPANSION LOCOMOTIVES. Class A2, OO> Switching. Class A3, OOO> Switching. Class A4, OOOO>	NSYL	24 4 VANL	67 A CO.	38	4. 65 4. 00 4. 05 4. 05 4. 10 4. 10	4. 75 4. 10 4. 25 4. 25 \$4. 10 4. 10	. 25 . 10 . 10 . 20 . 20 . 20 . \$0.00	5.6 2.2 2.5 4.9 4.9
178,000 pounds and over on drivers.  Switching.  Class C2, OOoo>	188	24 4 VANL 4 195	67 A CO.	38 65	4. 65 4. 00 4. 05 4. 05 4. 10 4. 10 4. 10	4. 75 4. 10 4. 25 4. 25 4. 25 \$4. 10 4. 10	. 25 . 10 . 10 . 20 . 20 . 20 . 20	5.6 2.2 2.5 4.9 4.9
178,000 pounds and over on drivers.  Switching.  Class C2, OOoo>  Passenger.  Passenger.  PEN  SINGLE-EXPANSION LOCOMOTIVES.  Class A2, OO>  Switching.  Class A3, OOO>  Switching.  Class A4, OOOO>  Switching.  Class A4, OOOO>  Switching.  Class B4, OOOO>  Freight  Class C2, OOOO>	188 10 780	24 	67 A CO. 35 61 53 82	38 65 53 87	4. 65 4. 00 4. 05 4. 05 4. 10 4. 10	4. 75 4. 10 4. 25 4. 25 \$4. 10 4. 10	. 25 . 10 . 10 . 20 . 20 . 20 . 80. 00 . 00	5. 6 2. 2 2. 2 3. 4. 9 4. 9
178,000 pounds and over on drivers.  Switching.  Class C2, 0000> Passenger.  Class C3, 00000> Passenger.  PEN.  SINGLE-EXPANSION LOCOMOTIVES.  Class A2, 00> Switching.  Class A3, 000> Switching.  Class A4, 0000> Switching.  Class B4, 0000> Switching.  Class B4, 0000> Passenger.	188 10 780	24 4 VANL 195 8 937 58	67 A CO. 35 61 53 82 32	38 65 53 87 32	4. 65 4. 00 4. 05 4. 05 4. 10 4. 10 4. 10	4. 75 4. 10 4. 25 4. 25 4. 25 \$4. 10 4. 10	. 25 . 10 . 10 . 20 . 20 . 20 . 20	5.6 2.2 2.5 4.9 4.9
178,000 pounds and over on drivers.  Switching.  Class C2, OOoo>  Passenger.  Passenger.  PEN  SINGLE-EXPANSION LOCOMOTIVES.  Class A2, OO>  Switching.  Class A3, OOO>  Switching.  Class A4, OOOO>  Switching.  Class A4, OOOO>  Switching.  Class B4, OOOO>  Freight  Class C2, OOOO>	188 10 780	24 	67 A CO. 35 61 53 82	38 65 53 87	4. 65 4. 00 4. 05 4. 05 4. 10 4. 10 4. 10 4. 85	4. 75 4. 10 4. 25 4. 25 4. 25 4. 10 4. 10 4. 10 4. 85	. 25 . 10 . 10 . 20 . 20 . 20 . 80. 00 . 00	5.6 2.2 2.5 4.9 4.9

### PENNSYLVANIA CO.-Continued.

PENNSYL	VANI	A CO.	Cont	inued				
Class.	Nun	Number.		rage ht on vers ns).	Rate per day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd.								
Class T2, oOOoo> Passenger	70	70	58	58	\$4. 25	\$4. 25	\$0.00	.0
Class F3, 000000> Passenger	56	73	91	94	4. 25	4. 25	.00	.0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.					3.20	, .		
Class I 2, 00000>	2	2	57	56				
Passenger					4. 25	4. 25	. 00	.0
PENN	SYLV	ANIA	R. R		1	-		1
	1				1		1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO> Switching	107	113	47	51	\$4.10	\$4.10	\$0.00	0.0
Class A3, OOO> Switching:	339	365	65	70				
144,100 pounds on drivers Under 144,100 pounds on drivers					4. 10 4. 35	4. 10 4. 35	.00	.0
Class B3, OOOo> Freight	210	204	68	68	4. 85	4. 85	.00	
Class B4, 0000o>	2204	2383	82	88	4. 85	4.85	.00	.0
Freight Class C2, O O o o >	362	307	45	46			.10	2.4
Passenger Class C3, OOOoo>	10	10	70	70	4. 15	4. 25		
Passenger Class E3, 00000>	1	1	83	84	4. 15	4. 25	. 10	2.4
Passenger Class E4, 000000>		1		118	4. 15	4. 25	.10	2. 4
Freight Class F2, oOOoo>	247	285	59	60		4.85		
Passenger Class F3, 000000>	112	137	90	91	4. 15	4. 25	.10	2.4
Passenger Class Mallet, 00000-00000>	1	1	219	219	4. 15	4. 25	.10	2.4
Freight					4.85	5. 15	. 30	6.2
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class F2, oOOoo> Passenger	3	2	54	59	4. 15	4. 25	.10	2.4
Class CCIs, OOOOoooo> Freight		1		193		5. 85		
PERE	MARG	UETI	re R.	R.	1	1	J.	]
	I	1	1	1	1	1	1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	9	3	31	28	\$3.80	\$4.10	\$0.30	7.9
Class A3, 000>	67	57	57	60	3.80	4. 10	.30	7.9
Class A4, 0000>	1	1	65	65	3.80	4. 10	.30	7. 9
Class B3, 0000>	63	52	51	56				
Freight: Cylinders 19 by 26 inches or over					4.65	4.75 4.75	.10	2. 2 6. 7
Cylinders less than 19 by 26 inches Class B4, 0000o>	166	166	84	84			.10	2.2
Freight Class C2, OOoo>	82	50	26	27	4.65	4. 75		
Passenger		]			3.85	4.25	. 40	10.4

PERE MARQUETTE R. R.—Continued.

Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		or 10 or 10 s or	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd. Class C3, OOOoo> Freight: Cylinders 19 by 26 inches or over	51	50	50	50		\$4.75	\$0.10	2.2
Cylinders less than 19 by 26 inches Passenger Class E2, 0000>	1	1	31	31	4. 45 3. 95	4.75 4.25	.30	6. 7 7. 6
Passenger Class E4, 000000> Freight		10		108	3.85	4. 25	. 40	10.4
Class F2, 00000> Passenger		23	45	45	3.85		. 40	10.4
Class F3, 000000>	10	15	70	72	3.95	4.25	.30	7.6

#### PHILADELPHIA & READING RY.

SINGLE-EXPANSION LOCOMOTIVES.   77			,		,	,			
Switching: First-class yards	SINGLE-EXPANSION LOCOMOTIVES.								
Switching: First-class yards	Class A2. 00>	77	75	46	49				
Second-class yards	Switching:								
Class A3, OOO	First-class yards								
Switching:	Second-class yards	G1	69		71		4.10	. 15	3.8
First-class yards		01	05	00	11				• • • • • • • • •
Class A4, OOOO>   20   15   67   76	First-class yards						4.10	. 05	1.2
Switching:	Second-class yards					3.95	4.10	. 15	3.8
First-class yards		20	15	67	76				
Class B3, OOOO>	First-class vards					4 05	4 10	05	1.2
Class B3, OOOO>	Second-class yards								
First-class yards	Class B3, 0000>	4	2	45	45				
Second-class yards						4.05	4 10	0-	1.0
Freight: Standard rate	Second-class yards					3 95			
Between Newberry Junction and Tamaqua, St. Clair, and Port Richmond.	Freight:					0. 50	4.10	.10	9.0
Tamaqua, St. Clair, and Port Richmond, via Tamaqua, and between Rutherford and Port Richmond.						4.75			
mond, via Tamaqua, and between Rutherford and Port Richmond.									
Rutherford and Fort Richmond								1	
Class B4, OOOOo>	Rutherford and Port Richmond					4.85			
First-class yards		484	507	71	77				
Second-class yards	Switching:							0.5	4.0
Freight: Standard rate	First-class yards					4.05			
Between Newberry Junction and Tamagua, St. Clair, and Port Richmond, via Tamagua, and between Rutherford and Port Richmond. Class C2, O00o>   135   142   41   45   4.85	Freight:		ĺ		İ		4.10	.10	3.0
Tamaqua, St. Clair, and Port Richmond, via Tamaqua, and between Rutherford and Port Richmond   135   142   41   45   4.85	Standard rate					4.75	4.75	.00	.0
mond, via Tamaqua, and between Rutherford and Port Richmond	Between Newberry Junction and								
Rutherford and Port Richmond									
Class C2, O O o > Passenger       135       142       41       45       4.90       4.90       4.90       4.90       4.90       6.00       6.00       6.00       6.00       7.20       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00       <	Rutherford and Port Richmond					4.85			
Passenger	Class C2, OO00>	135	142	41	45				
Express-train runs	Passenger						4.90		
Class C3, O O O O O	Evaress train runs					7.20			
Long-distance local runs	Class C3, OOOoo>	148	133	53	58	1.00			
Express-train runs 7.60  Switching: 7.60  Switching: 7.60  Sixthching: 7.60  Second-class yards 4.05 4.10 .05 1.2  Second-class yards 3.95 4.10 .15 3.8  Freight: 7.60  Standard rate 4.75 4.75 .00 .0  Between Newberry Junction and Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua; between 1.00  Tamaqua, St. Clair, and Port Richmond, via Tamaqua, St. Clair, and Port Richmond, via Tamaqua, St. Clair, and Port Richmond, via Tamaqua, St. Clair, and Port Richmond, via Tamaqua, St. Clair, and Port Richmond, via Tamaqua, St. Clai	Passenger						4. 25		
Switching:	Long-distance local runs					7. 20			
First-class yards	Switching:					7.60			
Second-class yards						4.05	4.10	. 05	1.2
Standard rate	Second-class yards					3.95			
Between Newberry Junction and Tamaqua, St. Clair, and Port Rich- mond. via Tamaqua: between						4 85	4 77	00	0
Tamaqua, St. Clair, and Port Rich- mond, via Tamaqua: between						4.75	4.75	.00	.0
mond, via Tamaqua; between	Tamaqua, St. Clair, and Port Rich-								
	mond, via Tamaqua; between								
Rutherford and Port Richmond	Rutherford and Port Richmond					4.85			********

## PHILADELPHIA & READING RY.-Continued.

Class.	Number.		Average weight driver (tons)		Rate per day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd.								
Class E4, 000000>		7				04 75		
Freight. Class F2, 00000> Passenger	50	51	50	54	*.****	4. 25		
Long-distance local runs					\$7.20 7.60	1. 20	••••••	
Express-train runs Class H3, 000000> Passenger	10	10	60	62	4. 90	4. 90	\$9.00	.0
PITTSBURG	Н. &	LAKE	ERI	ER.	R.	,		
SINGLE-EXPANSION LOCOMOTIVE.				1				
Class A3, 000>	98	103	70	76	04 10	64 10		
Switching. Class B4, OOOOo> Freight.	112	115	79	80	\$4.10 4.60	4.75	\$0.00	0.0
Class C2, OOoo>	19	18	48	48	4.30	4.30	.00	.0
Class C3, OOOoo> Passenger	10	15	78	79	4.30	4.30	.00	
Class F2, 00000> Passenger	5	5	48	48	4.30	4.30	.00	.0
TOLEDO &	OHI	O CE	NTRA	L RY	ζ.		1	
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>		28	57	57	\$4.00	\$4.10	\$0.10	2.5
Class A4, 0000> Switching		3		120		4.10		
Class B4, 00000>	62	60	77	78				
21 inch arlindars or over					4.75 4.60	4.75 4.75	.00	.0 3.3
20-inch cylinders 20-inch cylinders Class C2, OOoo> Passenger Class C3, OOOoo> Local freight, Nos. 71, 72, 88, and 89	18	15	38	41	3.65	4.25	.60	16.4
Class C3, OOOoo> Local freight, Nos. 71, 72, 88, and 89	23	23	46	46	4.90	5.00	.10	2.0
Other local freight. Through freight.					4.75	5. 15 4. 75	.40	8.4 5.6
Other local freight Through freight Mine runs Class F3, 00000> Passenger		4		67	4. 25	4.75	. 50	11.8
1 assenger						7. 20		

Switching	TOLEDO, ST. I	OUIS	& W	ESTE	ERN I	R. R.			
SINGLE-EXPANSION LOCOMOTIVES.	Class.	Nun	Number. drivers n		miles	or 10	Increase.		
Class A3, OOO>		1912	1914	1912	1914	1912	1014	Amount.	Per cent.
Switching	SINGLE-EXPANSION LOCOMOTIVES.1								
Class B3, 0000>	Class A3, 000>	10	10	61	61	93 95	S.1 10	\$0.25	6.5
Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals   Cals	Class B3, ((()(i)0)> Freight—	9	9	50	50				
Freight	Tocal	34	39	81	81				8.7
Passenger	Freight						4.75		1.1
Freight   Class F2, 00 tools   2   2   44   44   4.75   4.75   .05   1.15	Passenger. Class C3, OOOoo>	31	31	51	51				11.8
Passenger	Freight					4.70		.45	11.8
SINGLE-EXPANSION LOCOMOTIVES.			2			3.80	4. 25	.45	11.8
Class A2, OO>	VAI	NDAL	IA R.	R.					
Class A2, OO>					[				
Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Swit		1	1	40	40				
Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Swit	Switching					\$4.00	\$4.10	\$0.10	2.5
Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Switching   Swit	Switching. Class B3, 000o>	83	83				4. 10		2. 5
Freight	Switching							.00	0.0 2.5
Passenger	Freight					4. 85	4.85	.00	0.0
Passenger	Passenger					4. 15	4. 25		2. 4
Class 12, 0(10)00> 19 19 52 52 4 15 4.25 .10 2.4  Class 13, 0(10)00> 8 12 93 83 10 2.4  WABASH-PITTSBURGH TERMINAL RY.  SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> 1 42 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 \$4.00 .	Passenger Freight							.10	2.4 0.0
WABASH-PITTSBURGH TERMINAL RY.	Class F2, o(00)00>						4. 25	. 10	2. 4
Single-expansion locomotives.		8	12	93	83		4.25	.10	2.4
Class A3, OOO> 1 42 3 400	WABASH-PIT	TSBU	RGH	TERN	MINA	L RY.	1	1	1
Class A3, OOO> 1 42 3 \$4.00 \$4.00 \$2.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$34.00 \$					-		1		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1		49					
Switching     4.20 \$4.20 \$0.00       Freight     4.70 4.75 0.5       Class (2,0000)     2 2 33 33       Pasenger     3.80 4.25 45       Class (3,0000)     2 2 36 36 36       Switching     4.00 4.10 10 2.5	Switching		12		100	\$4.00			
Class (2, 0()00> 2 2 33 33	Switching. Freight								0.0 1.1
Switching	Class (2, 0000> Pa senger					3.80	4. 25		11.8
	Switching		2	36	36				2. 5 1. 1

<sup>&</sup>lt;sup>1</sup> Passenger service 5 hours or less.

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WEST SIDE BELT R. R.

Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less.		Increase.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.	1	1	37	37				
Class A2, 00> Switching. Class B4, 0000o>	2	2	80	80	\$4.00	\$4.10	\$0.10	2.5
Switching. Freight Class C2, OOoo>					4. 00 4. 70	4. 20 4. 75	. 20	5. 0 1. 1
Passenger		1 1	33	33	3.80	4. 25	. 45	11.8
Class C3, OOOoo> Switching	1	1	.40	40	4.00	4. 10	. 10	2.5

#### WHEELING & LAKE ERIE R. R.

				,				
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	5	5	43	43				
Switching					\$3.80	\$4.10	\$0.30	7.9
Class A3, 000>	29	29	52	52				
Switching—								
140,000 pounds on drivers					4.00	4.10	.10	2.5
Over 140,000 pounds on drivers					4.00	4.10	.10	2.5
Class B3, 000o>	7	5	43	41		1		
Freight, between 80,000 and 100,000								
pounds					4.50	4:75	. 25	5.6
Class B4, 0000o>	79	99	87	93				
Freight—								
Between 170,000 and 200,000 pounds					4.70	4.75	.05	1.1
Between 200,000 and 250,000 pounds					4.70	4.85	. 15	3.2
Class C2, 0000>		16	34	35				
Passenger			:		3.80	4.25	.45	11.8
Class C3, 000000>		48	40	39	- : - : : -	-::-		
Freight					4.50	4.75	.25	5.6
Class F2, 00000>	6	6	50	50		-:-:-		
Passenger					3.80	4. 25	.45	11.8
	J	1		ļ	ľ		1	

### ZANESVILLE & WESTERN RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Class B3, 000o>	4	4	43	43				
Local freight					\$4.50	\$5.00	\$0.50	11.1
Through freight				1	4.50	4.75	. 25	5.6
Work wreck circus and mine runs	}				4.25	4.75	. 50	11.8
Class B4, 00000>	7	9	61	63				
Freight Class C2, OO00>					4.60	4.75	.15	3.3
Class C2, O Ooo>	3	6	29	29				
Passenger					3.73	4.25	. 52	13.9
Class C3, 00000>	4	1	39	39				
Local freight					4.50	5.00	.50	11.1
Through freight					4.50	4.75	. 25	5.6
Work, wreck, circus, and mine runs					4.25	4.75	.50	11.8
							1	

# RAILROADS IN EASTERN TERRITORY AND BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN: 1913.

Matters in dispute between the Brotherhood of Locomotive Firemen and Enginemen and the eastern railroads, which finally culminated in arbitration proceedings, had their beginning in certain demands presented to the railroads by the employees in June, 1912. The proposals presented by the Brotherhood of Locomotive Firemen and Fuginemen, through its duly accredited officers, in support of the demands of the firemen and hostlers employed on the railroads named was for an increase in wages and for sundry changes in the rules controlling working conditions. As early as July 1, 1912, a meeting was had between a committee representing the firemen and the conference committee of managers of the railroads, in the city of New York. Subsequent to that date a number of similar meetings were held and much correspondence passed. The firemen were represented in these conferences by W. S. Carter, president, and other officers of the brotherhood, and the railroads were represented by Elisha Lee, chairman of the conference committee of managers. After numerous conferences and the exchange of proposals the parties to the controversy were unable to agree and jointly asked Martin A. Knapp, presiding judge of the United States Commerce Court, and Charles P. Neill, Commissioner of Labor, to mediate the differences between the firemen and the railroads, in pursuance of the provisions of the act of Congress commonly known as the Frdman Act.

These mediators, however, were unable to settle the differences. Soon thereafter the correspondence covering the negotiations between the brotherhood and the railroads, together with a historical statement, was published over the signatures of the officers of the brotherhood, and the question of a strike was submitted to the firemen employed throughout the territory covered by the railroads. The total number of votes cast were reported as 33,916, of which 32,918,

or 96.5 per cent were in favor of a strike.

Immediately following the counting of this strike vote, further conferences were held between the conference committee of managers and the brotherhood representatives but they were still unable to agree upon a settlement, and again the assistance of Martin A. Kn. pp. presiding judge of the United States Commerce Court, and G. W. W. Hanger, Acting Commissioner of Labor, in pursuance of the provisions of the Erdman, Act, was invoked to mediate the differences between the firemen and the railroads. Their efforts at mediation did not accomplish a settlement of the controversy, but resulted in an agreement to adjust the differences by arbitration.

## ARTICLES OF ARBITRATION AGREEMENT.

The articles of agreement of arbitration were made and entered into by the respective parties on the 18th day of February, 1913, and it was agreed that the questions to be submitted to arbitration would

be the requests of the employees as set forth in the "Second Amended Proposition of Locomotive Firemen in Eastern Concerted Wage Movement, 1912," dated December 18, 1912, which was as follows:

ARTICLE 1. A day's work: Ten hours or less, or 100 miles or less, will constitute a day's work in all classes of service, except as otherwise specified. The time for which a fireman will be paid will begin at the time he is required to report for duty and end when engine is delivered at point designated by the company.

ART. 2. Rates of wages: The following rates of wages per day will be the minimum rates paid in all classes of service on all railroads parties to this agreement:

(a) Passenger and through freight:

	All classes	Through freight.		
Weights of locomotives, in pounds on drivers.	of passen- ger service.	One fire- man.	Two fire- men.	
Less than 80,000. 80,000 and less than 100,000. 100 000 and less than 140,000. 140 000 and less than 170 000. 170 000 and less than 200 000. 200 000 and less than 250 000. 250 000 and less than 350 000. 350 000 and less than 400 000. 400 000 and less than 400 000.	2. 65 2. 80 3. 00 3. 20 3. 40 3. 60 3. 80 4. 00	\$2.90 3.00 3.20 3.35 3.50	\$3.35 \$3.35 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3.50 \$3	
500,000 and over	4.00		$ \begin{cases} 3.50 \\ 3.50 \\ 3.50 \end{cases} $	

Except as otherwise provided, on all engines weighing 200 000 pounds or more on drivers, when used in through freight service, two firemen will be employed.

(b) Switching service:

Switch engine firemen on engines weighing less than 140,000 pounds on drivers, per day of 10 hours or less, \$2.60.

Switch engine firemen on engines weighing 140,000 pounds or over on drivers, per

day of 10 hours or less, \$2.80.

(c) Road hostlers, road hostlers' firemen, and hostlers (other than road hostlers). The following wages per day will be paid to road hostlers, road hostlers' firemen, and hostlers (other than road hostlers):

Road hostlers, per day of 10 hours or less, \$3.75.
Road hostlers' firemen, per day of 10 hours or less, \$2.50.
Hostlers (other than road hostlers), per day of 10 hours or less, \$2.50.
The term "Road hostlers" will be understood to mean such hostlers as are employed in handling engines between passenger stations and roundhouses or yards, or on main

The term "Road hostlers' firemen" will be understood to mean such men as are employed to assist the road hostlers and to fire such engines as may be in charge of the

road hostlers

The term "Hostlers (other than road hostlers)" will be understood to mean such men as are employed in handling engines in and about the roundhouses, ash pit, or storage

(d) Electric locomotive firemen: The following rates of wages will be paid to electric locomotive firemen, according to class of service in which they are used

All classes of passenger, per day of 10 hours or less, 100 miles or less, \$3

All classes of through freight, per day of 10 hours or less, 100 miles or less, \$3.25. All classes of switching, per day of 10 hours or less, \$2.80. The term "Electric locomotive firemen" will be understood to mean the second man

on electric locomotives.

All working conditions applicable to steam locomotive firemen in steam service

will apply to electric locomotive firemen in electric service.

(e) Pusher and helper service: In pusher and helper service on engines weighing less than 250,000 pounds on drivers, firemen will be paid through freight rates according to weight on drivers. On engines weighing 250,000 pounds or over on drivers when used in pusher or helper service firemen will be paid \$3 per day of 60 miles or less, 6 hours or less. On grades or divisions of more than 10 miles in length relief firemen will be furnished and no fireman will be required to fire for more than 6 hours or 60 miles in any 24-hour period. Should a lighter engine be substituted for an engine of 250,000 pounds or more on drivers after one trip or vice versa, the miles, hours, rates

of pay as applied to the heavier engine will prevail.

To Local freight, way freight, pick-up, and set-out service: Firemen on all runs that load or unload freight, and firemen on all runs that set-out or pick-up cars, or do switching at four or more points between their initial and final terminals, will be considered as in local freight, way freight, pick-up, or set-out service and will be paid 25 cents a day in addition to through freight rates specified herein according to weight on drivers of engine used, provided, that on local freight, way freight, pick-up and setout trains, when locomotives weighing 200,000 pounds or more on drivers are used, and when at no time during the trip the tonnage of the train exceeds 60 per cent of the regular rating of the same class of locomotive in through freight service, there will be but one fireman employed at the following rates per day: On locomotives weighing 200,000 pounds on drivers and less than 300,000 pounds on drivers the rate of wages for the one fireman will be \$3.90 per day, and on locomotives weighing 300,000 pounds or more on drivers the rate of wages will be \$4.25 per day. After having started on a trip with one fireman on engines weighing 200,000 pounds or more on drivers the tonnage of the train will not be increased at any time during the trip beyond 60 per cent of the regular rating of the same class of locomotive when used in through freight service.

(g) Rates of wages to apply to all classes of service not specified. In all classes of service not specified firemen will be paid through freight rates according to weight on drivers, and two firemen will be used as in through freight service, except that in wreck train and work train service one fireman will be employed at the following rates: On locomotives weighing less than 200,000 pounds on drivers through freight rates will be paid; on locomotives weighing 200,000 pounds on drivers and less than 300,000 pounds on drivers the rate of wages will be \$3.65 per day; on locomotives weighing 300,000 pounds and over on drivers the rate of wages will be \$4 per day, it being understood that in ballast, filling and gravel train service through freight rates will be paid and two

firemen will be employed as in through freight service.

(h) Official record of weights on drivers: For the purpose of recording weights on drivers of locomotives each railroad, party to this agreement, will permanently post bulletins at all terminals showing accurately such weights for all locomotives in service.

ART. 3. Overtime: (a) General rule: Overtime will be paid pro rata in all classes of service, except passenger service, on a basis of 1 mile for each 6 minutes. Except as otherwise specified, the basis from which overtime in all classes of service will be computed will be 10 hours or 100 miles. Miles and hours will not be counted together, but where miles exceed hours, miles will be allowed, and where hours exceed miles.

hours will be allowed.

(b) Overtime in passenger service: Overtime in passenger service (except suburban service) will be paid at the rate of 35 cents per hour and on a basis of 20 miles per hour, five hours or less, 100 miles or less, to constitute a day's work. Overtime in suburban service will be paid at the rate of 35 cents per hour and on a basis of 10 miles an hour continuous service from time reporting for duty until relieved from duty. Ten hours or less, 100 miles or less, to constitute a day. All overtime in passenger service will be paid on a minute basis. In all passenger service hours or miles will be paid whichever are the greater.

(c) Overtime in pusher or helper service: Overtime in pusher and helper service on engines weighing less than 250,000 pounds on drivers will be paid for at pro rata rates for all over 10 hours or 100 miles. Overtime in pusher and helper service on engines weighing 250,000 pounds or more on drivers will be paid for at pro rata rate, 50 cents per hour or 5 cents per mile, for all over 6 hours or 60 miles. It is understood that firemen in pusher and helper service on engines weighing 250,000 pounds or more on drivers will not be worked more than 6 hours or 60 miles, except in cases of extreme

necessity.

ART. 4. Terminal delay: (a) When the actual departure of any train is delayed to exceed one hour after a fireman is required to report for duty, or when a train has reached its final terminal limits and is then delayed from any cause so that the fireman is not relieved from duty within 30 minutes after having reached the final terminal limits, the fireman will be paid an additional compensation for all such delays over one hour at the initial terminal and for all such delays over 30 minutes at the final terminal. In computing this additional compensation each six minutes of delay will be considered as 1 mile. Initial and final delay will be paid for in addition to overtime if any overtime is made.

ART. 5. Held away from home terminal: Firemen held at other than home terminal (including rest period) will be paid continuous time for all time so held after the expiration of 15 hours from time relieved from previous duty at the rate per hour paid him for the last service performed; less than one hour not to be paid for.

ART. 6. Assistance for passenger and freight firemen: On all engines in through freight service where but one fireman is employed, and on all engines in passenger service, coal will be kept where it can be reached by the fireman from all decks of all

engines.

ART. 7. Work not required of firemen: Firemen will not be required to clean engines, tanks, flues, nor to clean fires at terminals, nor to scour brass, paint stacks, smoke arches, or front ends, nor to place tools and supplies on engines or to remove same, nor to fill lubricators, headlights, markers, or lamps. However, firemen will be held responsible for knowing that the necessary supplies and proper tools for firing are placed on engines

before leaving the terminal.

ART. 8. Tie-up between terminals: When from any cause firemen are "tied-up" or relieved from service between terminals, they shall receive not less than a full day's pay for the class of service and engine for the period employed from leaving initial terminal to point of "tie-up" or relieved from service, and shall receive not less than a full day's pay from point of tie-up after again being called for service to the final terminal, when they will be relieved from further duty, and be again called for service in their turn. If more than 100 miles or more than 10 hours are made on either portion of the trip, overtime shall be paid for each portion separately.

ART. 9. Limitations and avoidance of this agreement: Rates of wages that are higher and conditions of employment that are better than specified in this agreement will remain in effect, and matters not covered or changed by this agreement will be maintained, but will be subject to change through negotiations by committees representing firemen on each individual line as in the past. Conditions and practices now in effect on any railroad party to this agreement will not be changed for the purpose of offsetting increases in wages and improved working conditions secured by this agreement.

setting increases in wages and improved working conditions secured by this agreement.

ART. 10. Date of agreement: Any increases in wages or working conditions of fire-

men secured through this agreement will be effective as of July 1, 1912.

#### SCOPE OF THE ARBITRATION.

The railroads which were parties to the arbitration agreement were as follows:

Baltimore & Ohio. Baltimore & Ohio Southwestern. Bessemer & Lake Erie. Boston & Albany. Boston & Maine. Buffalo, Rochester & Pittsburgh. Central New England. Central Railroad of New Jersey. Chicago, Indiana & Southern. Chicago, Terre Haute & Southeastern. Cincinnati, Hamilton & Dayton. Cincinnati, Lebanon & Northern. Cincinnati Northern. Cleveland, Cincinnati, Chicago & St. Louis. Dayton & Union. Delaware & Hudson. Delaware, Lackawanna & Western. Detroit, Toledo & Ironton. Detroit, Toledo & Milwaukee. Dunkirk, Allegheny Valley & Pittsburgh. Grand Rapids & Indiana. Hocking Valley. Indiana Harbor Belt. Indianapolis Union. Kanawha & Michigan. Lake Erie, Alliance & Wheeling.

Lake Erie & Western. Lake Shore and Michigan Southern. Lehigh Valley. Long Island. Maine Central. Michigan Central. Monongahela. New Jersey & New York. New York Central & Hudson River. New York, Chicago & St. Louis. New York, New Haven & Hartford. New York, Philadelphia & Norfolk. New York, Susquehanna & Western. Pennsylvania lines east. Pennsylvania lines west. Philadelphia & Reading. Rutland Toledo & Ohio Central. Toledo, Peoria & Western. Toledo, St. Louis & Western. Vandalia Wabash-Pittsburgh Terminal. Western Maryland. West Side Belt. Wheeling & Lake Erie. Wilkes-Barre & Eastern. Zanesville & Western.

#### ORGANIZATION OF THE ARBITRATION BOARD.

The above named railroads served practically all that part of the United States east of the Mississippi and north of the Ohio and Potomac rivers. The trackage of these companies was approximately 70,000 miles of main line, being something more than one-fourth of the entire trackage of the United States. They represented 40 per cent of the total capitalization of all railroads in the United States, and they transported about 47 per cent of the ton miles and about 43 per cent of the passenger miles of all the railroads in the United States. The firemen employed on these railroads numbered about 31,000 for the year 1912 and the wage payments of the same year were approximately \$29,000,000.

The railroads appointed as their arbitrator William W. Atterbury, of Philadelphia, Pa., and the brotherhood appointed as its arbitrator Albert Phillips, of Sacramento, Cal. The two arbitrators thus chosen, having failed within five days after their first meeting for that purpose to appoint a neutral arbitrator, requested the presiding judge of the United States Commerce Court, William A. Knapp, and the Acting United States Commissioner of Labor, G. W. W. Hanger, to appoint a third arbitrator. William L. Chambers, of Washington, D. C., was selected for this position on the

3d day of March, 1913.

The board of arbitrators appointed as above held its first meeting at the Waldorf-Astoria Hotel, in the city of New York, on Monday, March 10, 1913. William L. Chambers was elected chairman of the board and H. S. Milstead was appointed secretary. There were public hearings daily, with the exception of Sundays, from March 10 to and including April 5, 1913. From the latter date executive sessions of the board were held to consider the testimony, arguments, and exhibits to and including April 23, 1913, on which date the

board announced its award.

This was the first case in which eleborate statistical arguments and briefs were presented by each size. Employees from many different lines of railroads throughout the territory covered were called to testify on behalf of the firemen and in connection with the testimony given on the stand some 50 printed exhibits were submitted by W. S. Carter, president of the Brotherhood of Locomotive Firemen and Enginemen, who conducted this case on behalf of the employees. The railroads called perhaps an equal number of witnesses and filed a large number of exhibits. The evidence taken on the stand comprised more than 2,000 printed pages, and the four volumes of printed exhibits included as many more pages in the aggregate.

## THE TESTIMONY AND ARGUMENT OF THE EMPLOYEES.

The employees held that the two important questions to be decided

by the board of arbitration were:

(1) The request of the locomotive firemen and hostlers that uniform rates of wages and uniform rules of employment be placed in effect on all railroads participating in the arbitration, except that rates that were higher or rules that were more desirable already in effect, should be maintained.

(2) The request of the locomotive firemen and hostlers that an increase in rates of wages and changes in certain rules of employment be placed in effect on all railroads praticipating in the arbitration, except on such railroads as were already paying higher rates of wages or had already granted rules that were more desirable than those the locomotive firemen and hostlers requested.

The locomotive firemen and hostlers contended that in view of the fact that they had not asked, in some instances, as high rates of wages or as advantageous rules of employment as were already in effect on some of the railroads in eastern territory was evidence of

the conservatism of these requests.

## STANDARDIZATION.

On the question of uniform rates and rules the employees claimed that rates of wages and rules of employment should be made uniform on all railroads participating in the arbitration. In support of this they advanced the following argument:

(1) Uniformity in rates and rules were necessary for the purpose of comparison in future arbitrations as evidenced by the inability of the present board of arbitration to determine what had been the

increases or changes on any one railroad during past years.

(2) Uniformity was necessary and desirable in other industries as evidenced by the peace, contentment, and profit that prevailed in the mining industry where uniform rates and rules were in effect in the same competitive districts as compared with the instability of prices, the discriminations and abuses, and the continuous unrest of employees where uniformity did not prevail.

(3) Uniformity in freight and passenger rates was a privilege of the railroads guaranteed by Federal legislation and official rulings as evidenced by the Federal law requiring uniform passenger and freight rates to be charged by all railroads and to all patrons, thus

eliminating discrimination and favoritism.

(4) Uniformity in cost of materials and equipment purchased by railroads was an economic law as evidenced by the fact that favors in special prices were not charged to certain railroads by locomotive builders and the fact that all railroads pay the same price for steel rails, oils, and other materials and supplies in the same market.

(5) Uniformity in rates and rules should not be influenced by relative wealth of railroads, because in no other trade or industry did the wealth of the employer fix the wage of the employee. The less prosperous railroads profit as greatly by the labors of the locomotive

firemen or hostlers as the wealthiest of railway corporations.

(6) The further claim was made that the request for uniformity in rates and rules was not a "standardization"; that the employees had carefully graduated rates of wages in their request in accordance with the service rendered, the labor performed, and the productive efficiency of the firemen, and that they had requested a lesser rate on locomotives where the fireman produced a smaller profit for the railroads.

## THE BASIS OF A DAY'S WORK.

As to article 1, providing the basis of a day's work, the firemen contended that the adoption of this rule would be beneficial more for reasons of uniformity than for any other purpose, because—

(1) Thirty-eight of the fifty-four railroads participating in the arbitration had the rule in effect of "10 hours or less, 100 miles or

less" a day's work.

(2) Thirteen of the fifty-four railroads had rules fixing the time for which a fireman would be paid as beginning when he reported for duty.

(3) Had the eastern railroads not adopted such a rule it should

be placed in effect, because—

(a) Considering the arduous duties of the firemen they should not be required to work longer than 10 hours or more than 100 miles a day without additional compensation.

(b) On some railroads 9-hour and 8-hour days had been estab-

lished.

(c) A fireman should not be required to report for duty until his services were required, and he should not be required to render service without compensation therefor.

## WEIGHT ON DRIVERS AS A WAGE BASIS.

As to weight on drivers as a basis of wage payments the firemen contended that this was a proper method for fixing rates of wages, because—

(1) It was the basis demanded by western railroads, as demonstrated by the attitude of the conference committee of managers.

(2) It was the basis advocated by the conference committee of managers of the eastern railroads in the engineers' case of 1912.

(3) It was proposed by the conference committee of managers of the eastern railroads participating in this arbitration during the negotiations preceding this arbitration.

(4) It was the most practical basis for fixing wages in proportion to power developed by the locomotive, and, therefore, in proportion

to the service and productive efficiency of the fireman.

(5) It would make possible the fixing of a rate of wages that would equalize the difference between the excessive labor and productive efficiency of a fireman on a heavily loaded train and the lesser labor and productive efficiency of a fireman on a lighter train.

# Two Firemen Required on Large Engines.

As to the need of two firemen on the large locomotives the position

of the firemen was in substance as follows:

(1) To oppose the introduction of the modern large locomotives it was acknowledged would be unsound economy because the larger and more powerful the locomotive the greater the tonnage of trains and the earnings of the railroads.

(2) So far as they were physically able the firemen also realized

they should fire these large locomotives.

(3) The present request for two firemen on locomotives weighing 200,000 pounds or more on drivers included less than half the loco-

motives on which assistance should be furnished.

(4) With two firemen employed on the larger locomotives the efficiency of such locomotives would be greatly increased; the labor being shared by two firemen, the tonnage might be increased or the time reduced; an additional car on the train because of an additional fireman would produce revenue more than sufficient to pay wages of entire train crew; a reduction of two hours in overtime on each trip would save the expense more than equal to the cost of the second fireman; expense of tie-ups under the Federal law would often be avoided at a great saving to the railroads.

(5) The labor of one fireman on a large locomotive had passed human endurance, making it necessary for him to lay off a large portion of his time for purpose of recuperation, thus reducing his

earnings.

(6) Mechanical stokers had so far proved impracticable because of the great expense to the railroads of maintenance, the necessity for coal of certain size and quality, faulty construction, and inability to properly fire the locomotive. The cost of maintaining mechanical stokers and interest on investment probably would result in greater expense, it was declared, than the wages of a second fireman.

(7) With two firemen on a locomotive there would be greater opportunity for one of the firemen to assist the engineer in watching block signals, looking out for unexpected flags, obstructions, mis-

placed switches, etc.

(8) Relieving firemen in the middle of a division would not be practicable.

## HIGHER RATES OF PAY.

As to rates of pay, the firemen claimed that the advances requested were just and reasonable for the following reasons:

(1) Wages of locomotive firemen on eastern railroads had neverbeen commensurate with their labors, as compared with wages of

firemen on other railroads.

(2) The increases in wages of firemen during the past 10 years claimed to have been made by eastern railroads only emphasized the unfairness of the basic rate, when comparisons were made between present rates on eastern railroads and rates on other railroads.

(3) The requests made, it was declared, were less than the average wages paid locomotive firemen by eastern railroads, and very much

less than the wages paid on a majority of western railroads.

(4) Increase in tonnage of trains had greatly increased the labors of firemen.

The firemen contended also that the rates of wages requested for

switching service should be placed in effect because—

(1) Wages of switch-engine firemen were much lower than those of any other employees in yard service; their interests usually had been neglected by firemen's committees in negotiations of wage schedules; only on a few railroads had they been granted proper recognition.

(2) While the work of firing a switch engine was not so laborious as firing in road service, the fireman was required constantly to watch for signals and obstructions, and was held responsible therefor.

(3) The higher rate requested on the larger engine was justified by the claim that the larger engines were usually maintained in the most important and congested yards, where responsibility was greatest, and were also usually used in transfer service, for which most western railroads paid a higher rate than for regular switching service.

The position of the employees relative to rates of wages for road hostlers, road hostlers' firemen, and hostlers (other than road hostlers)

was as follows:

(1) The rates requested were equitable.

(2) Taken in connection with the definitions that were a part of the rule, they made it possible for the railroads to designate a comparatively few hostlers to act as road hostlers, thus escaping the necessity

of paying the higher rate except to road hostlers.

(3) Road hostlers were usually graduated firemen, but in some instances were disqualified engineers because of physical injury or ailment. As they were required to possess all the qualifications of engineers they should be paid a rate of wages commensurate to their duties and the services they perform.

(4) Hostlers (other than road hostlers) being required to operate locomotives in their care, and being held responsible for the condition and custody of locomotives, should be compensated in accordance

with these duties.

(5) Road hostlers, firemen, being not only firemen in the usual sense of the word, but also flagmen and switch tenders in the movement of the locomotive upon which they were engaged, should be entitled to the rate of pay requested.

As to the rates of wages requested for electric locomotive fire-

men, the contention of the firemen was briefly, as follows:

(1) The electric question was an economic one; a question as to what was to become of steam railroad employees as electric locomotives were substituted for steam locomotives; a question as to permitting the genius of the inventor and the avarice of the employer

depressing the American standard of living.

(2) The absence of physical labor had been considered when the request was made for one rate of wages for the electric locomotive firemen in each class of service, regardless of the size of the electric locomotive; the rate requested was slightly more than the minimum steam rates because it was not considered just that the advent of electric locomotives should drive all firemen down to the lowest steam rates.

(3) Aside from the handling of coal the electric locomotive fireman assumed all the duties and responsibilities of other firemen—the same rules were to be learned and observed, and signals, switches and ob-

structions were to be watched.

As to the rates of pay requested in pusher and helper service, the

arguments put forward by the firemen were, as follows:

(1) On locomotives weighing less than 200,000 pounds on drivers, through freight rates, with but one fireman, were a proper compensa-

tion for a 10-hour day.

(2) The work of a pusher or helper fireman was usually at isolated points; seldom were home conveniences present: usually it was necessary to maintain families at terminals and these together with other undesirable conditions made this request equitable.

(3) The work was exceedingly laborious, and the heat from the firebox more intense because of the slow movement of the locomotives.

(4) The pusher and helper fireman was required also to perform the duties of flagman and brakeman, as no conductor, flagman or brakeman was assigned to a helper or pusher locomotive.

As evidence of the justice of their requests for rates of pay in local and way freight, pick-up and set-out service, the following arguments

were presented by the employees:

(1) The justness and fairness of a differential for these branches of the service have been recognized on a majority of railroads and some railroads paid a higher differential than was requested.

(2) The railroads' exhibits showed that in this class of service that although the average length of a trip was shorter than in slow freight

the average time on the trip was much longer.

(3) Only in exceptional cases did firemen prefer this service, and then only because they were willing to accept less wages for the purpose of securing day work, or for the purpose of being with their families alternate nights and Sundays.

In support of their requests for the payment of through freight rates in all classes of service unspecified, the firemen submitted the

two reasons below:

(1) The elimination of the innumerable rates and diversity of

rules then in effect on railroads was desirable.

(2) Practically all railroads already paid through freight rates in some miscell neous classes of service, which was evidence that in each class of service the equity of payment of through freight rates

had already been recognized.

As to article 2 (h) official record of weights on drivers, the employees contended that the adoption of this request was essential in the event that the arbitration board should decide that the weight on drivers of locomotives was a proper basis of firemen's wages, because frank and open dealings required the greatest publicity as to what rate of wages was due on each and every locomotive in the service.

#### OVERTIME.

As to article 3 (a), overtime—general rule—the firemen claimed that there should be no question as to the adoption of this rule, because—

(1) Thirty-eight of the fifty-four railroads participating in the arbitration had a similar 10 hours per day rule, and practically all were paying firemen on the basis of a 10 hours or less 100 miles or less day.

(2) Twenty-six of the fifty-four railroads participating in this arbi-

tration were now paying on the "minute basis."

(3) The "minute basis" of paying overtime was usually desired, it was stated, by both the railroads and the firemen because it removed any incentive toward unfairness by either the subordinate officials of the railroads or the individual fireman.

As to article 3 (b), overtime in passenger service, the firemen maintained that this request was equitable and should be granted be-

cause-

(1) The lower rates of wages in passenger service were fixed with the understanding that 100 miles should be made in a comparatively short time. (2) Hour for hour in passenger service the physical strain on the larger locomotives was even greater than in average freight service, and the mental strain, because of rapidity with which signals were passed and observed, was greater than in freight service.

(3) The special rate of 35 cents per hour for overtime in passenger service requested was less than pro rata on a 5-hour day and other railroads had already recognized the justice of paying a higher rate

per hour.

(4) The overtime rule requested in suburban service was not only equitable but already in effect on several railroads. Suburbant service was made up of a series of short trips and, therefore, time for which firemen were paid should be computed from time they were required to report for duty, and overtime should begin at the expira-

tion of 10 hours after they were required to report for duty.

The firemen contended further that no class of men working under wage agreements received as little consideration in rates and rules relative to overtime as railroad employees in engine and train service; that not only was the hod carrier and building laborer paid much higher rates per hour than the locomotive fireman, but they were paid time and one-half and double time for all hours worked after an 8-hour day. It was also asserted that the complaints of the railroads against so-called "constructive mileage" should not be taken seriously, for the reason that within recent years firemen in all classes of service except passenger service usually worked on the "hourly basis," instead of the "mileage basis," owing to the excessive amount of time on the road.

## TERMINAL DELAY.

As to article 4, terminal delay, the firemen's case in this matter

may be summed up as follows:

(1) It was intended that the rule should be punitive in its application; that when subordinate officials of railroads were held responsible for the payment of "double" rate for terminal delays such delays would not occur; as excessive rates of overtime had limited the day's work in other industries, this rule would limit the time a fireman was required to report for duty and limit the time he was held on duty after he had completed his trip.

(2) Firemen contended for opportunity for rest, as much as for additional compensation for the work they performed when their trip was finished; they hoped by the adoption of this rule to secure opportunity to recuperate between trips and not be required to

report for duty until needed.

(3) If firemen were to be denied the relief sought by this rule because of exigencies of service they claimed that the railroads were better able to bear the burden of expense than the firemen were able to bear the burden of detention.

## HELD AWAY FROM HOME TERMINAL.

As to article 5, held away from home terminal, the firemen contended that this request was not only fair, but necessary, if burdens of modern railway practice were to be shared by the railroads, because—

(1) It was not unusual for employers to defray expenses of employees when sent from their homes in the performance of their

duties.

(2) The holding of firemen off duty at other than home terminals added to their expenses and decreased their earnings, thus working a double hardship upon the firemen who might have families at their

home terminal to support.

(3) This request when adopted would permit the railroads to hold a fireman at a terminal away from his home terminal for 15 hours and 59 minutes without compensation, and then pay him only for the hours held after the expiration of 15 hours.

## Assistance Required and Extra Work to be Eliminated.

As to article 6, assistance for passenger and freight firemen, the firemen declared that this request should be granted by the board, because—

(1) Since the introduction of larger tenders on practically all locomotives, so much coal was placed on the tender that not much more than half of it could be reached by the fireman from the deck of the locomotive, making it necessary for the fireman to handle a large

part of the coal twice, thus greatly adding to his labors.

(2) Firemen in making this request understood that each railroad might comply with it in a manner preferred by that road; where coaling stations were at frequent intervals the tender might again be filled; where the practice was to have special employees assist the fireman such practice might be continued; where mechanical devices had been or might be established for the purpose of keeping coal within reach of firemen, this method was acceptable.

As to article 7, work not required of firemen, the firemen contended that the adoption of this rule would be fair and should be

placed in effect, because—

(1) It was a gross injustice to require a fireman to perform any

labor for which no compensation was paid.

(2) Firemen on western railroads were relieved of the cleaning and painting of any part of a locomotive by an agreement reached between a conference committee of managers of western railroads and a firemen's committee in 1907.

(3) Where rules requiring firemen to do cleaning remained, they were sometimes used in a discriminating manner, resulting in the suspension or dismissal of one fireman, disliked by a subordinate official, while other firemen were not required to observe the rule; on some occasions the noncompliance with the cleaning rule by the fireman was used as an excuse by subordinate officials for noncompliance with other portions of the rules.

(4) Just as merchants no longer required their clerks to remain after closing hours to scrub floors, or to come before opening to sweep floors, railroads should relieve firemen from cleaning locomotives.

(5) No other class of railway employees were required to do such work, in addition to other and distinct duties, and no other class of employees had more other and distinct duties to perform than the locomotive fireman.

(6) If firemen were specially compensated for this work they would still prefer it be done by a boy usually employed at a lesser expense

by the railroads.

(7) Removing tools, filling lubricators, filling headlights, markers, and other lamps should not be done by firemen, as such work might and should be done while the locomotive was in charge of the round-house force.

## DELAY BETWEEN TERMINALS.

As to article 8, tied up between terminals, the firemen asserted that this rule should be put into the schedules for the following reasons:

(1) In a vast majority of tie-ups under the Federal 16-hour law, the direct cause was the overloading of locomotives resulting in the inability of trains to get over the division within the 16-hour period; the overloading of locomotives by heavy tonnage trains being exceedingly profitable to the railroads, they could afford to be liberal.

(2) Usually at tie-up points firemen were in an exhausted condition, after from 14 to 16 hours strenuous labor, and found only poor accommodations for rest and food; 10 hours of broken rest, perhaps on the locomotive or in the train caboose, after 16 hours of excessive labor, leaves them, it was stated, in no physical condition to resume the trip 26 hours after leaving the home terminal; upon reaching the end of the trip after tie-up, firemen were in no condition to again begin a trip without extra rest, but they often found that other members of their crews had been able to begin another trip, and as a consequence, made more mileage than firemen.

(3) Under such conditions a fireman should receive not less than a full day's pay for the work performed after resumption of trip from tie-up point, making it possible for him to take sufficient rest

without loss of earning power.

# CONDITIONS OF ARBITRATION AGREEMENT.

As to article 9, limitations and avoidance of this agreement, the firemen contended that this was a fair rule and should be granted:

(1) No better evidence of the conservatism of the firemen's present requests could be presented, it was claimed, than this rule, showing that some railroads participating in this arbitration were already paying rates that were higher and had in effect conditions of em-

ployment that were better.

(2) If disputes should arise as to the intents of the award reached by the arbitration board, such disputed matters should not be arbitrarily decided by the railroads or by the firemen, but an effort should be made to adjust equitably such differences of opinion; failing to reach an agreement as to the intent of any provision of the arbitration award both the railroads and the firemen should request a decision from the arbitration board, which decision should be accepted by both the railroads and the firemen as final and binding.

As to article 10—date of agreement—the firemen contended that

this request should be placed in effect, because—

(1) Negotiations were adjourned on July 2, 1912, at request of railroads; negotiations were again adjourned on August 28, 1912, at request of railroads.

(2) The conservatism of firemen had resulted in an entire year

passing since requests were first presented to railroads.

(3) If the award should not be made retroactive a premium would be placed upon vexatious delays, resulting in great expense to firemen; and if railroads should be allowed to profit by such delays there would be no end to wage negotiations.

# INCREASED PRODUCTIVE EFFICIENCY OF EMPLOYEES AND REVENUE GAINS OF THE RAILROADS.

As to the ability of the railroads engaged in the proceedings to pay increased compensation to their locomotive firemen and hostlers the testimony and argument of the employees was briefly as follows:

Judged by their progress in operating performance during the past decade, the onus of which had fallen upon locomotive firemen in the form of an increased consumption of coal for each locomotive-mile traveled, all the railroads engaged in the proceedings were able to pay advances in compensation to their firemen. Each transportation company showed operating revenue in 1912, as compared with 1902, sufficient to meet all advances in costs of operations and increases in interest charges on new capital actually invested in roadbed and equipment. Succinctly stated, the exhaustive study of the increase in the productive efficiency of locomotive firemen during the period 1902–1912, based upon the annual reports to the Interstate Commerce Commission of 44 respresentative railroads engaged in the arbitration proceedings, established the following conclusions:

(1) The total value of freight traffic transported by the 44 representative railroads studied was 40,221,623,889 ton miles greater in 1912 than in 1902, representing an increase of 62.90 per cent.

(2) In 1912, as compared with 1902, passenger traffic increased to

the extent of 4,097,928,324 passenger-miles, or 49.16 per cent.

(3) The traffic power of all single expansion locomotives in service on these 44 railroads increased during the past 11 years 337,501,616 pounds, or 120.69 per cent.

(4) The average revenue freight train load was 135.43 tons or

35.13 per cent greater in 1912 than in 1902.

(5) In face of this extraordinary expansion of traffic, however, the number of freight train miles, because of larger locomotives and cars and heavier trainloads, increased during the period of 1902-1912, only 19.36 per cent, and the increase in the number of passenger train miles during the 11 years 1902-1912 was only 26.37 per cent. The increase in the total number of train miles was only 13.29 per cent.

(6) As a combined result, therefore, of the large increase in tractive power of locomotives, and in freight train and passenger train loads, the large expansion in passenger and freight traffic during the period 1902–1912 was transported with a comparatively small increase in the number of firemen. Only 26.32 per cent more freight train fire-

men and only 27.80 per cent more passenger train firemen were em-

ployed by these 44 railroads in 1912 as compared with 1902.

(7) The number of transportation units handled per fireman, therefore, was much greater in 1912 than in 1902. The ton-miles per freight-train fireman were 1,773,985, or 28.50 per cent greater in 1912 than in 1902, and passenger-miles per passenger-train fireman

were 159,985, or 16.88 per cent more in 1912 than in 1902.

The firemen's fundamental claim was that, as the result of these improvements, which had made possible the transportation of a larger quantity of freight and passengers per train, the fireman had been compelled to undergo a constant increase in the amount of work required of him, which was well exemplified by the larger quantity of coal which he had to handle. In other words, the improvements in transportation which had made it possible to handle the increasing volume of freight with fewer train miles had added greatly to the arduousness of work or physical exertion required of locomotive firemen. Their hours of work had also been lengthened and their earning ability, even at higher rates of remuneration, had been curtailed.

The entire cost of the operation of the 44 representative railroads studied was 43 cents more per revenue train mile in 1912 than in 1902, but the increase in revenue from operation during this same period was 56 cents per revenue train mile, leaving a net gain in revenue over and above increases in expenses of operation of 13 cents per revenue train mile. A grant of a 25 per cent advance in compensation to locomotive firemen would cost the railroads only \$0.014 per revenue train mile, which deducted from the net gain in revenue for the fiscal year 1912 would still leave \$0.048 per revenue train

mile available for the benefit of stockholders.

By reference to Exhibits 50 and 51, presented by the Brotherhood of Locomotive Firemen and Fnginemen, it was pointed out that an increase of 20 per cent to firemen, equivalent in dollars and cents to \$4,936,108, would have absorbed only four hundred and lifty-eight thousandths of 1 per cent of the operating revenues of 1912 of the railroads engaged in this arbitration. The extent to which the transportation companies added to their gross and net earnings during the last half of the calendar year 1912, as compared with the last six months of the calendar year 1911, showed a greatly advanced increase as against the revenues set forth in the tables, compiled by the employees which extended only to July 1, 1912.

All the railroads engaged in the present proceedings, when the actual amount of capital invested in roadbed, structures, and equipment was considered, without reference to watered capitalization or financial investments, had sufficient operating revenues, it was asserted, to cover all operating expenses, including a liberal advance

in wages to firemen and all legitimate capital charges.

#### THE TESTIMONY AND ARGUMENT OF THE RAILROADS.

The position taken by the railroads was put forward under six

general heads, as follows:

1. The railroads contended that a comparison of the amount of work performed by firemen in 1902 and in 1912, and the amount of wages paid a fireman in 1902 and 1912 showed that a fireman's pay had increased during that period more than the amount of his work.

They further claimed that nothing had taken place since the adjustment of 1910 to necessitate any further increase or the establishment

of a minimum day's pay in the eastern territory.

2. The railroads declared further that the fact that the wages of firemen in the eastern district were lower than those in the western district was not conclusive on the question of their sufficiency, since wages in the eastern district had always been on a lower basis than in the western district and in the case of the firemen were nearer the basis of wages in the West than in the case of industrial employees.

3. It was argued that the weights on drivers was not a governing factor in itself of the work required of firemen, and therefore the question of a second man should not be decided on this basis alone.

- 4. If uniform wages and working conditions were desirable they should be made uniform as a whole, and not made uniform by only bringing up the low spots and bettering the less favorable working conditions.
- 5. The rates and working conditions applying to firemen in the steam service were not applicable to firemen or helpers on electric locomotives.
- 6. A company in poor financial condition should be permitted to pay wages that would obtain men of whatever grade they might require.

INCREASED EARNINGS.

Taking up the first of these general subjects—that of increase in work and pay of firemen—the railroads presented several exhibits showing comparisons for 1902 and 1912. For example, they showed that the annual earnings by firemen's Exhibit 12 and railroads' Exhibit 1 for 1902 were \$648, and for 1912, \$925.69, an increase of

\$277.69, or 42.9 per cent.

In this connection, reference was made by the railroads to the question of the relative amount of overtime which firemen worked as compared with 1902, and attention was called to the frequent reference to this question in argument of counsel for the firemen; that it had been stated repeatedly, when increased daily compensation and increased annual compensation were brought out either from the employees' witnesses or from the railroads' witnesses, that overtime was probably due to an increase in the number of hours on the road. There is, however, no evidence introduced in behalf of the firemen on this question, and their position was sustained only by statements of counsel. From the testimony and exhibits of the railroads it was, however, clear that there has been no increase in the amount of time on the road since 1902, but rather a substantial decrease. Not the least attempt was made to challenge the fact plainly established by railroads' exhibits that the average time on duty per trip had decreased.

MINIMUM DAY'S WAGE.

Considering the question of a minimum day's pay, the railroads rested their case on this question largely on the decision in the eastern engineers' arbitration and quoted at length from that part of that award in their argument. In the engineers' case, it was pointed out, the board simply established certain minimum rates, but failed to define how such minima should be applied, leaving the question open

to serious misunderstandings. The railroads contended that the principle of a minimum day's wage refers to the calendar, or rather to a 24-hour period day, and that the principle of a minimum wage a day never contemplated the payment of two minima per day without giving service approximating the wages paid. The railroads insisted that payments for service in excess of the minimum day's wage or in excess of the mileage and also in excess of specified trips should, in fairness to them, be paid for on the basis of miles or hours, whichever was the greater, and asserted further that this method would produce liberal compensation for the service so rendered.

## Uniform Rates and Rules.

The railroads deemed that the eastern district should have the same rates of pay as those in effect in the western district. They attempted to show by statistics that in reality there was but a very slight differential between the earnings per 100 miles run of the firemen in the

two districts.

Uniform rates and working rules, the railroads claimed, could only be established where uniform conditions existed, and further, that operating conditions were not uniform, nor could they be made so, even if it was desired, and, therefore, any attempt at uniformity must of necessity be made on some arbitrary basis, which to the railroads did not seem proper.

## FINANCIAL ABILITY TO PAY.

The position of the railroads to the effect that the financial condition of a railroad should have some bearing on the rate of wages paid was fully set forth in Exhibit 1, Sub-Exhibit 11, which showed that some roads were financially unable to stand any additional expense, and others actually showed a deficit. In addition to this the railroads claimed that any abnormal increase in rates granted firemen was certain to bring about other collateral increases, thus adding to the burden which the weaker railroads were now carrying.

# ARGUMENT AS TO SPECIFIED REQUESTS.

As to the detailed requests of the firemen, the opposing argument of the railroads has been summarized and set forth in the following

pages.

Article 1. A day's work: The railroads stated that because of the fact that this was the general practice on the railroads in the eastern district, they believed that the general terms of this article should be granted. The award, however, when made should specifically set forth what should be done with the numerous specified runs now paying higher than the basic rates, of which the time limits were, generally speaking, also higher, but in a few instances lower than justified by the mileage on a 10-mile per hour basis. To reduce these time limits without at the same time reducing the specified trip rate to the basis of mileage, with a minimum of 100 miles, would be equivalent to granting a substantial increase in pay on specified runs already paying a much higher rate than the mileage times the basic rate,

Article 2. Rates of wages—passenger: The railroads stated that the firemen's original demands as applied to passenger service called for an increased outlay of \$336,475 per annum, or 5.7 per cent, while their second amended demands called for an increased outlay of \$1,842,413.22 per annum, or 32.3 per cent. By reference to the minutes of meetings of the conference committee of managers with the firemen it would be seen that the firemen's committee apparently did not understand that their amended request was nearly six times the increase called for in their original request, so far as passenger service was concerned, thus indicating that their requests were perhaps not as carefully considered, even by themselves, as the gravity and importance of the case demanded.

The opportunities in the passenger service, it was claimed, to make large mileage within a very short time were such as to justify a very

much lower rate than in the freight service.

In the freight service the speed basis was fixed at 10 miles equals one hour, while in through passenger service the speed basis was fixed at 20 miles as the equivalent of an hour. If, therefore, the question of the proper relation in the basic rate for the two services was to be determined by the opportunities or ability to make mileage, it would appear that the passenger rates petitioned for were entirely too high.

Firemen must be considered, the railroads declared, from the standpoint of serving an apprenticeship, during which time they were receiving journeymen's pay, which was not the case in other apprenticeship service. In addition, firemen in all classes of service were assured of their promotion to engineers within a reasonable number of years in service, because of the fact that generally speaking, there was but one fireman to one engineer and a railroad's engineers are almost always obtained exclusively from among its firemen. The average service of firemen in the eastern district was slightly more than six years, until their promotion to engineers. This was fully shown, it was claimed by railroads' Exhibit 1, Sub-Exhibit 2.

Another very important development affecting the question was, the railroads argued, the fact that most roads using the larger engines in passenger service were, as rapidly as possible, equipping such engines with superheaters and brick arches, and some railroads were installing mechanical stokers, thereby reducing the coal consumption and at the same time making the work of the fireman much lighter. It was uniformly admitted by the firemen who testified in behalf of the employees as well as those who testified in behalf of the railroads that engines equipped with superheaters would do the same or greater amount of work as saturated steam engines with a substantially less

Based on the rate of \$4.25 recently granted passenger engineers it would be observed, the railroads stated, that the firemen were asking a much higher ratio of the engineers' rate, except on the smaller

engines below 80,000 pounds on drivers.

amount of fuel.

In connection with article 2, rates of wages, through freight, the railroads stated that the fixing of rates for railroad train and engine employees was the most intricate of any class of service with which the railroads had to contend. In almost any other occupation it was possible to arrive at an approximately equitable basis by the fixing of compensation more or less upon an hourly basis. To do so, however, in the train and engine service would not be satisfactory to

either the men or the railroads, for the reason that it would take away the incentive or opportunity to earn a full day's wage in less than the established time in hours, which increased the earning power of employees per month above the calendar days in the month, while a method of wage payment based on hours would retard the movement of traffic and deprive the railroads of the most economic use of their power and equipment. The railroads were willing, therefore, that the rates, as a general proposition, should be based on two general principles—"miles" and "time"—and the relation of these two factors should be considered in connection with the character

of the service in fixing rates of pay.

The rates of the firemen showed, it was claimed, that for a number of years, both in the eastern district as well as for the United States as a whole, the relation they bore to the engineers' rates had been gradually advancing from 56.63 per cent in 1900 to 61.15 per cent in 1911. Exhibit 1, Sub-Exhibit 34 (railroads), showed the average tractive power for the year 1912 as compared with 1900, while Exhibit 1, Sub-Exhibit 22, showed the average trainload for the same period, and from these statements it was seen that the average tractive power in the period named underwent an increase of 52.2 per cent, while the average trainload showed a gain of only 36.5 per cent. It was therefore clear that the railroads had not received the full benefit of the increased tractive power of locomotives in heavier trainloads. Exhibit 1, Sub-Exhibit 33, sheet 2, set forth the fuel consumption in freight service per 100 locomotive miles, from which it would be observed, the railroads claimed, that during the period 1902 to 1912 the coal consumed per 100 locomotive miles had increased 46.8 per cent, while the wages paid to the firemen per locomotive mile in that period had increased 59 per cent. This proved, it was asserted, that on the basis of coal consumption the firemen had been more than compensated for any increase in coal handled.

With reference to that part of the proposal calling for two firemen the railroads stated that the question of two firemen, considered from the standpoint of equity as between the firemen and the railroads, is or should be in reality a demand for any one of several forms of relief. The railroads believed that the question of two firemen was one that was absolutely of a local character and should be solved in each instance by a consideration of all conditions surrounding a run

or set of runs.

It was contended on the part of the railroads that the arbitrary demand for a second fireman on all locomotives in through freight service weighing 200,000 pounds or more on drivers was unreasonable and not justified by local conditions at all points, nor was it justified by local conditions at all times on the same division. This was the opinion, it was pointed out, expressed by several witnesses for the railroads. Approximately 20 per cent of the through freight business in the eastern district was what was known as fast or preference freight, on which the trainload represents considerably less than full rating, and in some instances only half the full tonnage rating. It was therefore quite clear, from the railroads' standpoint, that while it might be proper to furnish assistance to slow freight men hauling full tonnage over certain divisions, or portions of a division, it would be entirely improper to require this same assistance on the light tonnage trains, known as fast or preference freight. Again, the grades of the

division might be such, it was stated, as to require assistance only over a portion of the division, instead of over the whole, and as a consequence the arbitrary demand of the firemen for two men could

not be justified under such conditions.

The answer of the railroads to article 2, rates of wages in switching service, as requested by the firemen, was that in many respects switching service, particularly in the larger yards, was a preferred service, inasmuch as the day consisted of regular hours of duty, the men on the service not being subject to calls at irregular hours except perhaps in cases of emergency. Furthermore, from the very character of the service this work was light, as far as firing the locomotive was concerned, which fact might be corroborated by reference to Exhibit 1, Sub-Exhibits 34 and 36, which showed that for the year 1912 the average consumption per mile in freight service was 204.3 pounds, as against 108.8 in shifting service, indicating that the fuel handled by firemen in shifting service is approximately one-half of that handled by firemen in freight road service.

A careful comparison of the rates paid in the eastern district indicated, the railroads asserted, that the minimum rates asked for by the firemen were the maximum rates for the class of engine paid in the district, and it was the contention of the railroads that local conditions did not warrant such a high minimum at all points; neither could they see the justice of a different rate for the larger engines in

switching service.

As to hostlers, the railroads pointed out that their Exhibit 2, Sub-Exhibit 033, showed that only 8 of the 50 roads involved in the arbitration proceedings had rules or regulations containing provisions for rates for hostlers. Because of this fact it would appear that there was no proper basis for these demands in this proceeding. The number of hostlers applying to the first two definitions as given by the firemen was small, very few of the roads permitted any one but promoted men to handle engines over main tracks, even between engine houses and yards or stations. With reference to the third definition—"Hostlers other than road hostlers,"—it was the contention of the railroads that the nature and character of their work more nearly corresponded to that of roundhouse or engine house employees, and

therefore could not consistently be classed with firemen.

As to the demand for the same rates of pay in electric service as in steam service, the statement advanced was that it was not the contention of the railroads that the actual earning capacity of the helper on the electric locomotive should be reduced below that of a fireman on a steam locomotive, but they did claim that for a day's work they should be permitted to get an additional output in the way of increased mileage, because in this service the railroads really paid the man for time rather than labor. The fireman or helper on an electric locomotive was practically relieved of all physical labor and protected against extremes in weather conditions; he was merely an attendant placed in the locomotive to guard against accidents in case the engineer from any cause should become disabled. His primary duty was to observe signals and perform such other minor duties as was required of him by the engineer. The position required no special skill or training, as was clear from the testimony of the road foremen of electric engines on the New York Central and Pennsylvania railroads.

The railroads contended that the rates and working conditions in effect were more than fair and equitable for the service in question and presented arguments and a number of reasons for this conclusion.

Article 2. Rates of wages, pusher and helper service: The objec-

tions of the railroads to the granting of this proposal were:

(1) The fact that the demands fixed the day for engines weighing 250,000 pounds or over on drivers at 60 miles or 6 hours, which in itself represents a decrease of 40 per cent in miles or hours, as com-

pared with the usual 100-mile or 10-hour a day proposition.

(2) Because the demand for a 6-hour day was further added to by their request for a relief fireman on grades or divisions of more than 10 miles in length, practically meant two firemen on this class of engines, for it so happened that in a great majority of cases pusher and helper service on the roads in the eastern district covered a distance of more than 10 miles in length, so that in reality these demands meant: (a) Double the outlay in the number of men employed, and (b) 40 per cent less output in mileage per fireman engaged in this service.

It was a well known fact, it was asserted, that the firemen engaged in pusher and helper service were engaged in actual firing for only very short periods. Testimony was offered showing that the work of a fireman in pusher service was less arduous than in through freight service, and so far as the employment of a relief fireman was concerned the argument made and testimony offered covering through freight service applied, it was claimed, to this article with equal force. The 6-hour day requested would be positively impracticable, because of the extremely short day demanded which permitted of no exceptions under any circumstances. In many instances so much of the six hours would have elapsed before the actual push began that it would be necessary to relieve the first man called and bring a new man into the service, because the first man could not complete the

push within the 6-hour limit.

Article 2. Rates of wages, local freight: The answer of the railroads to this request was that the differential as between rates paid in through freight service and local freight service originally applied only to the train crew and was primarily intended as compensation for the additional labors required of the train crew in loading and unloading freight at the several stations between terminals. Notwithstanding the award in the engineers' case, which granted the engineers in local freight service 25 cents additional per 100 miles over that in through freight service, the railroads contended that the conditions surrounding firemen engaged in local freight service as against those engaged in through freight service did not justify any differential in the rates. In the case of the engineers there was some ground for a differential by reason of the numerous stops and the necessary physical labor on the part of the engineers due to the frequent stops. This argument could not apply to firemen, however, because the trains were almost always light.

The stipulation that runs which set out and picked up cars and did switching at four or more points between their initial and final terminals would, it was claimed, add very greatly to the number of trains and crews that would hereafter be considered as coming within local freight rates and conditions. In the case of the Philadelphia & Reading Railway it was shown by testimony that under the rule

requested practically every freight train on the road would be a local

freight train.

The demands of the firemen were declared to be excessively high both as to rates and to the definition placed on what trains shall be considered in the local freight class. They could not be justified by conditions surrounding the service, and, therefore, should be denied.

Article 2. Rates of wages, nonspecified service: The railroads stated that they had no objection to having through freight rates applied to service not otherwise specified. They did seriously object, however, to the rates and conditions demanded in the article covering

through freight service.

In the matter of mechanical stokers, the railroads asserted that from the testimony given by their witnesses it was clear that engines equipped with mechanical stokers, even when the stoker did not give perfect service, required very much less physical labor on the part of the fireman, regardless of the size of the locomotive, and this reduction of work would be further lessened with the development of the stoker. There could be, therefore, no possible reasons, it was claimed, for paying the firemen on locomotives equipped with mechanical stokers on the basis of weight on drivers, or, for that matter, on any other basis that would provide for a differential in the rates as between large and small engines. In fact, from the testimony it would seem only just and proper that a lower rate should be paid when mechanical stokers were used.

Article 2. Weights of locomotives: The answer of the railroads to this proposal was that they had no objection to furnishing in any

proper manner information affecting rates of pay for firemen.

Article 3. Overtime: The answer of the railroads to this proposal, briefly stated, was as follows: To the first paragraph of this article, by reason of the general practice in effect in the territory, they did not make any serious objection, provided it was clearly understood that overtime in all classes of service, except passenger, should be based on 1 mile for each six minutes, or, as more commonly stated, 10 miles per hour or 100 miles per day. The railroads stated that their understanding of this article was that on runs of 100 miles or less overtime would begin after the expiration of 10 hours, and that the time after which overtime began would be automatically increased according to the mileage of the run, or, in other words, on a run of 110 miles overtime would begin after 11 hours and on runs of 120 miles overtime would begin after 12 hours.

The railroads directed special attention to the fact that the firemen's demands called for overtime in all passenger service except suburban service, to be paid for on the basis of 20 miles per hour, which demands would place all of the short "turn-around" runs, not considered in the suburban service, on a 20-mile per hour basis. In many instances it would put men in this service, it was claimed, on overtime before the run was half completed, by reason of long

lay-over periods between trips.

Overtime payments were, perhaps, as much the result of the men as of the railroads, it was declared, and it would be a very dangerous precedent to establish a higher rate for dead or nonremunerative time than the rates prevailing for working or running time, because the premium thus granted would be an incentive to make overtime rather than to avoid it, and in this way not only the railroads but also the

public would suffer by reason thereof. While the railroads and the different organizations generally recognize pro rata rates for overtime, the position of the railroads was that from the standpoint of equity and justice a somewhat lower rate for overtime should apply, which in itself would remove any incentive to make overtime on the part of the

employees.

In suburban service employees fixed the minimum day at 10 hours, but inasmuch as engineers, conductors, and trainmen on practically all railroads in the eastern territory had an 8 and 12 hour rule, it was believed that less complications would result and a more equitable arrangement will be arrived at by adopting this rule for the firemen. It should be understood, however, that the time limits of 8 and 12 hours apply to the minimum rate and 100 miles, and any excess rate paid over the basic rate should operate to increase these time limits accordingly. Likewise mileage in excess of 100 miles should give pro rata increases in the time limits.

As to overtime in pusher and helper service, the position taken by the railroads was that the work of the firemen on these large locomotives should not be adjusted by the rate or by the reduction in the number of hours or mileage constituting a day, but, on the contrary, such assistance should be given as might be determined upon after making a thorough investigation of the conditions surrounding the service. For these reasons the railroads objected to not only the rate per hour asked for as applied to overtime, but also the 6-hour basis, or 60 miles, after which overtime should be computed.

Article 4. Terminal delay: Briefly stated the answer to this proposal by the railroads was as follows: The application of this article to the operating conditions of the railroads would be very complicated and, in addition to the actual increase paid to the firemen, in reality would represent double pay for the same service. The generally recognized method of payment of trainmen, including firemen, not only in the eastern district but also in others, was largely made a mileage basis. It was clear, therefore, that the general principle underlying the payment of such service was based on two essentials, namely, "time" and "mileage," and if the men exceeded either one or the other of these essentials, additional payments were made for such service.

As regards initial terminal delay the railroads stated that the reasons assigned for declining to allow initial terminal delay by the board in the engineers' case was sound, and in the judgment of the railroads, applied with equal force to final terminal delay, and the board was requested to give weight to the decision in that case on this question. The railroads were a unit on the proposition that an employee's time should begin as soon as he was required to report for duty and should continue until he was relieved from duty, without the introduction of any side issues. The demands of the firemen, it was claimed, contained in this article should be refused.

Article 5. Held away from home terminal: The railroads asserted in their reply to this proposal that the Federal 16-hour law required road crews to be given 8 or 10 hours rest (the latter in case of 16 consecutive hours previous duty), during which period the men were not subject to call. Taking the rest period into consideration, which the railroads were bound to observe, the demands of the firemen left only 7 hours under the one case and 5 hours under the other

in which the railroads must be prepared to return crews to what is known as their home terminal, under penalty of full pay if not so returned. The public guaranteed no traffic, much less were the railroads assured of traffic at regular intervals. Fluctuations in business were beyond the railroads' control. This demand was therefore unreasonable, and particularly so when consideration was given to the fact that practically all of the railroads had at a very large expense provided the employees with resthouses and wash rooms, which privileges were being rapidly extended.

Article 6. Assistance to passenger and freight firemen: The rail-

roads' objections to this proposal were threefold:

(1) This demand would in many instances, when applied to through passenger runs without stops, require a second man to accompany the engine over the entire run.

(2) The handling of coal had always been considered part of the fireman's work, and no serious testimony was introduced by the firemen to show any reason why they should be relieved of it.

(3) On many railroads included in the eastern district arrangements were in force on the harder service runs for keeping coal within reach of the firemen from the decks of engines, and since cases of this kind were so largely local in character it was thought that the question should be left with the individual roads and their men for settlement.

Article 7. Work not required of firemen: This article practically relieved the fireman, the railroads claimed, from cleaning of locomotives at all and was so sweeping in its character that they doubted the propriety of favorable consideration, from a sanitary standpoint Reference was made to exhibits offered by the railroads showing that most of the roads parties to the arbitration agreement required very little cleaning work now to be done by firemen other than the inside of the cab and the windows. On a number of the branch lines and on yard engines and work train engines, where the service was comparatively light, the firemen were still required to do a certain amount of cleaning and wiping of the locomotives, but such cleaning was no hardship and should not be disturbed by any general rule which entirely eliminated the responsibility of the fireman so far as cleaning his engine was concerned. On engines running in pool service and laying over at terminals where engine house employees were located, the cleaning was now being largely taken care of by such forces.

With reference to the firemen being relieved from placing tools and other supplies on locomotives, the railroad stated that this preparatory work was now being largely performed by the fireman while the engineer was inspecting his engine and doing other necessary work. If the fireman should be relieved of this work it would naturally follow that their reporting time would not need be the same as that of the engineer. In other words their time on duty would be reduced and consequently their earnings, in case of overtime, would be relatively lower.

Article 8. Tied up between terminals: The reply of the railroads

to this proposal may be summarily stated as follows:

(1) The rules in effect, covering practically the entire eastern district, provided that if crews were tied up between terminals they should again be considered on duty and under pay immediately upon

the expiration of the minimum period allowed for rest on the basis of miles or hours, whichever was the greater, from tie-up points to the next tie-up point or terminal, which certainly insured liberal compensation for services which bring no return to the railroads.

(2) In compensating employees for hours on duty the rule need only provide for allowing time, from time reporting for duty until final relief, less rest period provided by law, and since regulations in effect on the railroads did fully compensate employees for all time given to the service, and in many instances special allowances were in effect, there would seem to be no good reason for changing present practices.

Article 9. Limitations and avoidance of agreement: This article the railroads considered one of the most important subjects submitted for arbitration, and should, they thought, be decided upon its merits, rather than upon precedents established in other awards

either through mediation or arbitration.

The firemen contended that any advantages in high rates or favorable working conditions enjoyed by them should not be disturbed. Likewise the railroads insisted that advantages enjoyed by the several lines should not be removed. High spots in rates and favorable working conditions, as a rule, were the result of settlements made on the individual roads, through the "give-and-take method," and since the standardization of rates and the establishment of a minimum day's pay was the result of petition on the part of employees there could be no justice in retaining "high spots" unless this board also allowed the "low spots" to remain. The firemen were dealing for the firemen as a whole, it was stated, and should the board rule that present "high spots" should not be disturbed the railroads requested, upon a basis of equity to the railroads, that at the same time lower rates should not be advanced.

Article 10. Date of agreement: The answer of the railroads to this proposal was that they desired that the question of the effective date of the award, like all other questions in regard to this arbitration, be determined in strict compliance with the Erdman Act. The law in accordance with the terms of which both parties had unreservedly agreed to settle their difficulties fixed with absolute certainty the date upon which the award of the board should become operative. Section 4 of this act provided that the award having been so filed—

shall go into practical operation and judgment shall be entered thereon accordingly at the expiration of 10 days from such filing, unless within such 10 days either party shall file exceptions thereto for matter of law apparent on the record, in which said award shall go into practical operation and judgment be entered accordingly when such exceptions shall have been finally disposed of either by said circuit court or on appeal therefrom.

A careful consideration of this and subsequent sections of this act, the railroads believed, would settle this question, and since this was the effect of the law, the request of the firemen that the award should be retroactive, the railroads claimed, must be considered to have

been impliedly stricken out.

In summarizing the evidence, the railroads first called attention to the fact that there was no consistent theory underlying the demands of the firemen. In the majority of instances the railroads claimed that the firemen appeared to take the position that they should be given certain rates because those rates were paid in the West. In switching service, the railroads declared that the firemen, on the

other hand, were not content to ask for western rates, but sought to secure uniform rates as high as the highest in effect in the East. In electric service, the railroads claimed that the firemen abandoned both of these positions and frankly admitted that their demands were based on the theory that as an economic proposition the introduction of an improved machine should not result in any decrease in the earnings of the operators. The railroads declared that the firemen were not consistent in their position, for they went so far as to ask that they be paid, not the minimum rates in effect in the same class of steam service, but in some cases medium rates and in others maximum rates.

In the requests bearing upon working conditions, the railroads declared that the firemen were generally asking for the most favorable that could be found on any particular road and not in effect in any territory as a whole, and the combination of these exorbitant rates and maximum working conditions, with the existing higher rates and better working conditions now in existence on some individual roads in the eastern territory, would force the compensation paid firemen, and therefore the cost to the railroads, in the eastern territory to a plane much higher than in any other territory in the United States.

The granting of the demands of the firemen would cost the railroads of the eastern district, it was asserted, the sum of \$10,363,430 per annum, or an increase of 35.5 per cent in the wages paid this class of employees, and would be equivalent to placing a prior lien upon the railroads in this district ahead of all other obligations equal to the enormous sum of \$259,085,753 calculated upon a 4 per cent basis. The railroads contended that no such increase was justifiable, and pointed to the liberal treatment granted the firemen during the past decade, as fully set forth in their Exhibit 1, Sub-Exhibits 3, 4, and 5, showing the increases in rates of pay secured since the year 1900.

The railroads claimed, in conclusion, to have shown that specific rates, rules, and regulations were not susceptible of standardization in the East as a whole other than upon some arbitrary basis, and since this method could only be used at the expense of, or rather, in lieu of equity and justice, standardization should not be granted or

further extended.

COMPARISON OF REQUESTS OF EMPLOYEES AND THE AWARD OF THE BOARD.

In the following pages a comparison is made of the requests of the employees which constituted the basis of the arbitration proceedings and the award of the board of arbitration. Both the requests and the award have been digested and placed in parallel columns, so that they may be quickly compared.

Requests of Employees and Award of Board of Arbitration Compared.

REQUESTS.

AWARD.

ARTICLE 1. Ten hours or less, 100 miles or less to constitute a day's work in all classes of service, except as otherwise specified. Time for which firemen be paid will begin at time required to report for duty and end when engine is delivered at point designated by company.

ARTICLE 1. Ten hours or less, 100 miles or less to constitute a day's work in all classes of service, except as otherwise specified. Time for which firemen will be paid will begin at time required to report for duty and end when engine is delivered at point designated.

ART. 2. Rates of wages.—(a) Passenger

and through freight:

Passenger service: Less than 80,000 pounds on drivers, \$2.55; 100,000 and less than 140,000, \$2.80; 80,000 and less than 100,000, \$2.65; 140,000 and less than 170,000, \$3:170,000 and less than 200,000, \$3.20; 200,000 and less than 250,000, \$3.40; 250,000 and less than 300,000, \$3.60; 300,000 and less than 350,000, \$3.80; 350,000 and less than 400,000, \$4; 400,000 to 500,000 and over \$4

350,000 and less than 400,000, \$4; 400,000 to 500,000 and over, \$4.

Through freight: Less than 80,000 pounds on drivers, \$2.90; 80,000 and less than 100,000, \$3; 100,000 and less than 140,000, \$3.20; 140,000 and less than 170,000, \$3.35; 170,000 and less than 200,000, \$3.50; 200,000 and less than 250,000, \$3.50; 200,000 and less than 300,000, \$3.50; 300,000 to 500,000 and over, \$3.50. All engines 200,000 pounds and over on drivers to have 2 firemen at rates above on these weights.

- (b) Switching service: Switch-engine firemen on engines weighing less than 140,000 pounds, on drivers, per day of 10 hours or less, \$2.60; 140,000 pounds or over, on drivers, \$2.80.
- (c) Road hostlers, per day, 10 hours or less, \$3.75; road hostlers, firemen, per day, 10 hours or less, \$2.50; hostlers (other than road hostlers), per day of 10 hours or less, \$2.50.
- (d) Electric locomotive firemen: All classes of passenger service per day of 10 hours or less, 100 miles or less, \$3; through freight per day of 10 hours or less, 100 miles or less, \$3.25; switching service per day. 10 hours or less, \$2.80. All working conditions applicable to steam locomotive firemen in steam service will apply to electric locomotive firemen in electric service.
- (e) Pusher and helper service: In pusher and helper service on engines weighing less than 250,000 pounds on drivers, firemen will be paid through freight rates according to weight on drivers. On engines weighing 250,000 pounds or over on drivers, when used in this service, firemen will be paid \$3 per day of 60 miles or less, 6 hours or less. On grades or divisions of more than 10 miles in length relief firemen will be furnished and no fireman be required to fire for more than 6 hours or 60 miles in any 24-hour period. Should lighter engine be substituted for engine of 250,000 pounds

ART. 2. Rates of wages.—(a) Passenger

and through freight:

Passenger service: Less than 80,000 pounds on drivers, \$2.45; 100,000 and less than 140,000, \$2.60; 80,000 to 100,000, \$2.50; 140,000 to 170,000, \$2.70; 170,000 to 200,000, \$2.85; 200,000 to 250,000, \$3; 250,000 to 300,000, \$3.20; 300,000 to 350,000, \$3.40; over 350,000 pounds on drivers, \$3.60; Mallet engines, regardless weight on drivers, \$4.

Through freight: Less than 80,000 pounds on drivers, \$2.75; 80,000 to 100,000, \$2.85; 100,000 to 140,000, \$3; 140,000 to 170,000, \$3.10; 170,000 to 200,000, \$3.20; 200,000 to 250,000, \$3.30; 250,000 to 300,000, \$3.55; all engines over 300,000, \$4; Mallet engines, regardless weight on drivers, \$4. Where 2 firemen are employed on a locomotive as a result of the application of article 6 hereinafter, the rates of pay to each fireman shall be: 100,000 to 250,000, \$2.75; over 250,000 pounds on drivers, \$3.

(b) Switching service: Switch-engine firemen on locomotives weighing less than 140,000 pounds, on drivers, per day of 10 hours or less, \$2.50; 140,000 pounds or over, on drivers (excluding Mallets, \$4),

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(c) Hostlers, per day of 10 hours or less, \$2.40. If hostlers are employed in handling engines between passenger stations and roundhouses or yards, or on main tracks, they will be paid, per day, 10 hours or less, \$3.25. If men are employed to assist hostlers in handling engines between places above named, they will be paid

per day, 10 hours or less, \$2.50.

(d) Helper on electric locomotive: Term "helper" understood to mean second man employed on electric locomotives, shall receive per day, 10 hours or less, 100 miles or less, \$2.50, passenger service; through freight, per day, 10 hours or less, 100 miles or less, \$2.80; switching service, per day, 10 hours or less, \$2.50. All working conditions applicable to steam locomotive firemen in steam service will apply to helpers in electric service.

(e) Pusher and helper service: Firemen on locomotives in pusher and helper service, mine runs, work, wreck, belt line, and transfer service, and all other unclassified service will be paid through freight rates according to the class of

engine.

or more on drivers after one trip, or vice versa, the miles, hours, rates of pay as applied to the heavier engine will prevail.

(f) Local freight, way freight, pick-up and set-out service: Firemen on all freight runs that load or unload freight, and firemen on all freight runs that set out or pick up cars or do switching at four or more points between initial and final terminals will be considered as in local freight, way freight, pick-up or set-out service, and will be paid 25 cents per day in addition to through freight rates specified herein according to weight on drivers of engine used, provided that on local freight, way freight, pick-up and set-out trains when locomotives weighing 200,000 pounds on drivers are used and when at no time during the trip the tonnage of the train exceeds 60 per cent of the regular rating of the same class of engine in through freight service, there will be but one fireman employed at the following rates per day: 200,000 pounds and less than 300,000 pounds on drivers, one fire-man, \$3.90; 300,000 pounds and over, \$4.25 per day. After having started on trip with one fireman on engines weighing 200,000 pounds or more on drivers, tonnage of train will not be increased at any time during trip beyond 60 per cent of the regular rating of the same class of locomotive when used in through freight service.

(g) Rates of wages to apply to all classes of service not specified: In all classes of service not specified, firemen will be paid through freight rates according to weight on drivers, and two firemen will be used as in through freight service, except that in work train and wreck train service one fireman will be employed at following rates: Less than 200,000 pounds on drivers, through freight rates; 200,000 and less than 300,000 pounds on drivers, \$3.65; 300,000 pounds and over, \$4, it being understood that in ballast, filling, and gravel train service through freight rates will be paid, and two firemen will be employed as in through freight service.

(h) For purpose of recording weights on drivers of locomotives, each railroad, party to this agreement, will permanently post bulletins at all terminals showing accurately such weights for all locomotives in

ART. 3. Overtime.—(a) General rule: Overtime will be paid pro rata in all classes of service, except passenger, on the basis of 1 mile for each 6 minutes. Except as otherwise specified, the basis from which overtime in all classes of service will be computed will be 10 hours or 100 miles. Miles and hours will not be counted together; where miles exceed hours miles will be allowed; where hours exceed miles hours will be allowed.

(f) Firemen in local freight service will be paid 15 cents in addition to through freight rates, according to class of engine.

(g) Award on this item covered in award on item (e).

(h) For the purpose of officially classififying the locomotive, each railroad, party to this arbitration, will keep bulletins at all terminals showing accurately the weight on drivers of all engines in its service.

ART. 3. Overtime.—(a) Overtime in all classes of service, except passenger, will be paid for pro rata on the minute basis. Except as otherwise specified, 10 hours or 100 miles will be the basis for computing overtime. Miles and hours will not be counted together; when miles exceed hours miles will be allowed, and when hours exceed miles hours will be allowed.

(b) Overtime in passenger service (except suburban service) will be paid at the rate of 35 cents per hour on a basis of 20 miles per hour, 5 hours or less, 100 miles or less to constitute a day's work. Overtime in suburban service will be paid at the rate of 35 cents per hour on a basis of 10 miles an hour continuous service from time reporting for duty until relieved from duty, 10 hours or less, 100 miles or less, to constitute a day. All overtime in passenger service will be paid on minute basis. In all passenger service, hours or miles will be paid, whichever is the greater.

(c) Overtime in pusher and helper service on engines weighing less than 250,000 pounds on drivers will be paid at pro rata rates for all over 10 hours or 100 miles. Overtime in pusher and helper service on engines weighing 250,000 pounds or more on drivers will be paid for at pro rata rate, 50 cents per hour or 5 cents per mile for all over 6 hours or 60 miles. It is understood that firemen in pusher and helper service on engines weighing 250,000 pounds or more on drivers will not be worked more than 6 hours or 60 miles except in cases of

extreme necessity.

ART. 4. Terminal delay.-When the actual departure of any train is delayed to exceed 1 hour after a fireman is required to report for duty, or when a train has reached its final terminal limits and is then delayed from any cause so that the fireman is not relieved from duty within 30 minutes after having reached the final terminal limits, the fireman will be paid an additional compensation for all such delays over 1 hour at the initial terminal and for all such delays over 30 minutes at the final terminal. In computing this additional compensation each 6 minutes of delay will be considered as 1 mile. Initial and final delay will be paid for in addition to overtime if any overtime is made.

ART. 5. Held away from home terminal.— Firemen held at other than home terminal (including rest period) will be paid continuous time for all time so held after the expiration of 15 hours from time relieved from previous duty at the rate per hour paid him for the last service performed; less than 1 hour not to be paid for. (b) Overtime in passenger service (except suburban service) will be paid at the rate of 30 cents per hour on the basis of 20 miles an hour, computed on the minute basis, 5 hours or less, 100 miles or less to constitute a day's work.

(c) On short turn-around runs, no single one of which exceeds 80 miles, including suburban service, overtime shall be paid for all time actually on duty or held for duty in excess of 8 hours (computed on each run from the time required to report for duty to end of that run) within 12 consecutive hours; and also for all time in excess of 12 consecutive hours, computed continuously from the time first required to report to the final release at the end of last run. Time shall be counted as continuous service in all cases where the interval of release from duty at any point does not exceed 1 hour.

ART. 4. Terminal delay.—No initial terminal delay is allowed beyond that involved in the rule that pay shall begin in all cases at the time fireman is required to report for duty, but final terminal delay after the lapse of 1 hour will be paid for at the end of the trip at the overtime rate, according to class of engine, on the minute basis. For freight service final terminal delay shall be computed from the time the engine reaches the designated main-track switch connecting with the yard track. For passenger service final terminal delay shall be computed from the time the train reaches the terminal station. If road overtime has commenced terminal overtime shall not apply, and road overtime shall be computed to the point of final release.

ART. 5. Held away from home terminal.—Firemen in pool freight and in unassigned service held at other than home terminal will be paid continuous time for all time so held after the expiration of 18 hours from time relieved from previous duty, at the rate per hour paid him for the last service performed. If held 14 hours after the expiration of the first 28-hour period he will be paid continuous time for the next succeeding 10 hours, or until the end of the 24-hour period, and similarly for each 24-hour period, and after. Should a fireman be called for duty after pay begins his time will be

computed continuously.

ART. 6. Assistance for passenger and freight firemen.—On all engines in through-freight service, where but one fireman is employed, and on all engines in passenger service, coal will be kept where it can be reached by the fireman from all decks of all engines.

ART. 7. Work not required of firemen.—Firemen will not be required to clean engines, tanks, flues, nor to clean fires at terminals, nor to scour brass, paint stacks, smoke arches, or front ends, nor to place tools and supplies on engines, or to remove same, nor to fill lubricators, headlights, markers, or other lamps. However, firemen will be held responsible for knowing that the necessary supplies and proper tools for firing are placed on engines before leaving the terminal.

ART. 8. Tied up between terminals .-When, from any cause, firemen are "tied up" or relieved from service between terminals, they shall receive not less than a full day's pay for the class of service and engine for the period employed from leaving initial terminal to point of tie up or relieved from service, and shall receive not less than a full day's pay from point of tie up, after again being called for service, to the final terminal, when they will be relieved from further duty, and be again called for service in their turn. more than 100 miles or more than 10 hours are made on either portion of the trip, overtime shall be paid for each portion separately.

ART. 9. Limitation and avoidance of this agreement.—Rates of wages that are higher and conditions of employment that are better than specified in this agreement will remain in effect, and matters not covered or changed by this agreement will be maintained, but will be subject to change through negotiations by committees representing firemen on each individual line as in the past. Conditions and practices now in effect on any

ART. 6. Assistance for passenger and freight firemen.—When a second fireman is deemed necessary on any engine where one fireman is employed, or assistance is deemed necessary, the matter will be taken up with the proper officials by the firemen's committee. Failing to reach a settlement, the matter shall be referred to an adjustment commission, to be composed of five persons, two of whom are to be chosen by the railroad company, two by the firemen's committee, and one to be selected by the four thus chosen, who shall be the chairman of the commission. Should the four fail to agree upon the fifth, then three days after the last of the four is selected the fifth man shall be named by the presiding judge of the United States Commerce Court. If for any reason the selection of the fifth man can not be made by the presiding judge of said court, he shall be named by the United States district judge of the district in which the controversy may have arisen. All expenses incurred in connection with the settlement of such matters shall be borne equally by the two parties to the controversy.

ART. 7. Work not required of firemen.— Firemen will be relieved of cleaning engines. Lubricators will be filled, headlights, markers, and other lamps cared for (including filling, but not lighting); and all supplies placed on engines at points where roundhouse or shop force are maintained. The fireman shall not be relieved of responsibility of knowing that engines for which they a e called are

properly equipped for service.

ART. 8. Tied up between terminals.—Firemen tied up between terminals on account of the hours-of-service law will be paid continuous time from initial point to tied-up point. When they resume duty on a continuous trip they will be paid from tied-up point to terminal on the following basis: For 50 miles or less or 5 hours or less, 50 miles' pay; for more than 50 miles up to 100 miles, or over 5 hours and up to 10 hours, 100 miles' pay; over 100 miles or over 10 hours, at schedule rates. This provision does not permit the running of firemen through terminal or around other firemen at terminals, unless such practice is permitted under the pay schedule.

ART. 9. Limitation and avoidance of this agreement.—The earnings of firemen in any class of service shall not be diminished by the provisions of this award; and if the rates that were higher or the conditions that were better antecedent to this award are necessary to guarantee this requirement they shall be maintained. Neither shall the earnings of the firemen in any class of service be increased above what the higher rates of

railroad, party to this agreement, will not be changed for the purpose of offsetting increases in wages and improved working conditions secured through this agreement.

ART. 10. Date of agreement.—Any increases in wages or working conditions of firemen secured through this agreement will be effective as of July 1, 1912.

pay and the conditions that were better antecedent hereto guaranteed him by a combination of the rates herein established with the conditions of service antecedent hereto, or vice versa. It is not intended that any of the terms or provisions of this award shall debar committees from taking up for adjustment with the management of the respective railroads any questions or matters not specifically covered herein.

ART. 10. Date of agreement.—This award shall take effect at the time and in the manner provided by the act of Congress entitled "An act concerning carriers engaged in interstate commerce and their employees," approved June 1, 1898.

## EFFECT OF APPLICATION OF AWARD OF ARBITRATION BOARD ON INDIVIDUAL RAILROADS.

No uniform basis for the payment of locomotive engineers has up to the present time been adopted in the territory east of the Ohio and north of the Potomac rivers. Some railroads classify their rates of pay according to the size of cylinders; others, according to weight on drivers; still others, according to the number of wheels, and according to the trade name of the engines. Not until the year 1913 were the rates of pay to locomotive firemen in the eastern territory standardized according to weight on drive wheels, and the same basis of payment both to engineers and firemen in the West was not adopted until the year 1915. As a consequence, it was impossible, with the printed working schedules as a basis, to make any comparative study as to how rates of pay to engineers and firemen were affected by awards of arbitration boards. Methods of wage payment were frequently changed by the application of the decision of arbitration boards.

Under these conditions, it was decided to use as a basis of comparison of rates of pay the classification of locomotives required by the Interstate Commerce Commission. Up to the fiscal year 1915 this classification was uniformly used by the railroads in reporting to the commission. In the following comparisons the figures relative to the number of locomotives and their average weight on drivers (tons), prior to the fiscal year 1915, are based on information secured from pages 103 to 107 of the annual reports of the carriers to the Interstate Commerce Commission. In the form of annual report adopted for use in 1915 there were considerable changes made throughout, and locomotive classification was furnished in a different manner by the carriers. Because of this variation it was necessary to request the railroad companies to furnish data on locomotive equipment that would be comparable with prior years.

After the information as to number and weight of locomotives in the various classifications was secured from the annual reports of the railroads to the Interstate Commerce Commission, printed forms were mailed to the companies to be filled out. Each sheet was divided into three similar sections, providing for single-expansion, fourcylinder compound, and two-cylinder compound or cross-compound locomotives. The information requested from the carriers was as follows:

(a) Class of service in which each locomotive was engaged.

(b) Number of locomotives of each class.

(c) Rates of pay per day of 100 miles or 10 hours or less to (1)

engineers, (2) firemen.

Because of the change in the 1915 reports, mentioned above, a special sheet for this year was prepared and sent to the railroad companies requesting, in addition to the other inquiries listed, the average weight on drivers (tons) of locomotives. The printed forms sent to the railroads were for the fiscal years prior and subsequent to any arbitration proceedings they were involved in, either with their engineers or firemen.

In the following derivative tables, rates of pay to locomotive firemen and hostlers are shown prior and subsequent to the award of

the arbitration board in eastern territory of April 23, 1913.

Rates paid to locomotive firemen before and after the arbitration of 1913, and amount and per cent of increase in rates awarded by the arbitration board according to class of engines.

BESSEMER & LAKE ERIE R. R.

Class.		Number. drivers (tops)		Rate per day of 100 miles or 10 hours or less to firemen.		Increase to firemen.		
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>		13	69	69	\$2.75	\$2.75	\$0.00	0.0
Class B3, OOOo> Through freight	25	25	62	62	3.00	3.00	.00	0.0
Local freight					3.00	3. 15	.15	5. 0
Switching. Regular passenger.					2.75	2.75	.00	0.0
Excursion		119	86	87		2.75		•••••
Engines 74 to 82 tons on drivers			80	01				
Through Local					3.00	3. 10	.10	3. 3 8. 3
Engines 89 and 91 tons on drivers: Through					3.00	3. 20	. 20	6. 7
Local					3.00	3. 25	.25	8.3
Engines 112 to 114 tons on drivers: Through					3.00	3. 35	. 35	11.7
Local					3.35 2.75	3. 45 2. 75	.10	3. 0 0. 0
Class C2, OOoo>	15	10	37	44				
Regular passenger Excursion					2.62	2. 62 2. 75	.00	0.0
Class C3, OOOoo>	7	7	47	47	2.75	2.75	.00	0.0
Class C3, O O Ooo> Switching. Regular passenger.					2.62	2.62	.00	0.0
Freight					3.00	2.75 3.00	.00	0.0
Class F3, 00 0 000> Regular passenger.		4		72		2.70	• • • • • • • • • • • • • • • • • • • •	
Excursion						2.75		

BALTIMORE & OHIO R. R.

BALTIMORE & OHIO R. R.										
. Class.	Nun	aber.	weig	rage ht on vers ns).	day of miles	e per of 100 or 10 or less emen.	Increase t	o firemen.		
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES.										
Class A2, 00>	20	24	36	40						
Switching: First-class yards					\$2,65	\$2.65	\$0.00	0.0		
Second-class yards					2.55	2.55	.00	.0		
All other yards	138	136	54	54		2.50	. 00	.0		
					2, 65	2, 65	.00	.0		
First-class yards Second-class yards					2.55	2.55	.00	.0		
All other yards Class A4, 0000>	26	6	90	68	2.50	2.50	.00	.0		
Switching:					2, 65	2, 65	.00	.0		
First-class yards Second-class yards					2.55	2.60	. 05	2.0		
All other yards. Class B3, 000o> Freight.	52	46	49	49	2.50	2.55	. 05	2.0		
Freight. Class B4, 00000>	1 160	1 183	83	83	2.75	2.85	. 10	3.6		
Freight:	1,103	1, 100	00	00						
173,000 pounds and less than 274,000 pounds					3.00	3. 20	. 20	6.7		
Between 140,000 pounds and 173,000 pounds					2, 95	3.00	.05	1.7		
All other engines					2.75	2.85	.10	3. 6		
Class C2, O Ooo >			35	35	2.30	2.45	.15	6.5		
Class C3, OOOoo>	284	277	53	54			• • • • • • • • • • •	•••••		
80,000 to 100,000 pounds on drivers					2.30	2.50	. 20	8.7		
100,000 to 140,000 pounds on drivers Freight:					2, 30	2.60	. 30	13.0		
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2. 40 2. 40	2.85 3.00	.45	18. 8 25. 0		
Class E4, 000000>	161	322	109	111						
Freight Class F2, oOOoo>	52	52	58	58	3. 10	3, 30	. 20	6.5		
Passenger. Class F3, 000000>		105	81	81	2, 40	2.60	. 20	8.3		
Passenger:		200								
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2.50 2.50	2.70 2.85	. 20	8. 0 14. 0		
FOUR-CYLINDER COMPOUND LOCOMOTIVES.										
Class A6, 000000>	1	_ 1	167	167	2 25	4 00		10.4		
FreightClass 0000-0000>	20	30	231	232	3.35	4.00	. 65	19. 4		
Freight Class 0000-0000>	1	1	155	155	4.00	4.00	.00	.0		
Switching	• • • • • •				2.75	4.00	1.25	45.5		
TWO-CYLINDER COMPOUND OR CROSS-COM- POUND LOCOMOTIVES.										
Class C3, 00000>	9		65							
Freight					3.00					
BOSTO	NT 6- 1	A CATAT	E D I	D.	1		1			
BOSTO	714 Oc .	MAIN.	E IV. 1							
SINGLE-EXPANSION LOCOMOTIVES.										
Class A2, 00> Switching.	37	20	35	36						
Switching. Class A3, 000>	191	201	57	57	\$2.35	\$2.50	\$0.15	6.4		
Switching: First-class yards					2.35	2.60	.25	10.6		
Second-class yards					2.35	2.50	.15	6.4		
Class B3, OOOo> Through freight:		173	60	60			•••••			
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.75 2.75	2.85	.10	3. 6 9. 1		
Local freight:	İ						.25			
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2. 75 2. 75	3.00 3.15	.25	9. 1 14. 5		

#### BOSTON & MAINE R. R.-Continued.

DODION & MAINE II. II.—Continued.										
Class.	Nun	nber.	weig dri	erage ht on vers ns).	day miles hours	e per of 100 or 10 or less emen.	Increase t	o firemen.		
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES—contd.										
Class B4, OOOOo>		222	78	76						
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers Local freight:					\$2.90 2.90	\$3.10 3.20	\$0.20 .30	6. 9 10. 3		
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2.90 2.90	3. 25 3. 35	. 35	12. 1 15. 5		
Class C2, O'Ooo>		304	36	34	2. 40	2. 45	. 05	2.1		
80,000 to 100,000 pounds on drivers Class C3, OOOoo>	137	140	50	50	2.40	2.50	.10	4.2		
Passenger: Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.60 2.60	2.60 2.60	. 00	.0		
Hreight through:				1	2.60	2. 60 2. 75	.00	.0		
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.75 2.75 2.75	2. 85 3. 00	.10	3. 6 9. 1		
					2.75 2.75	2.90 3.00	.15	5. 5 9. 1		
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers Class C4, OOOOoo> Through freight:	18	18	64	64	2.75	3. 15	. 40	14.5		
Through freight: 100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2. 90 2. 90	3.00 3.10	.10	3. 4 6. 9		
170,000 to 200,000 pounds on drivers. Local freight:					2.90	3. 20	.30	10.3		
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2. 90 2. 90	3. 25 3. 35	.35	12. 1 15. 5		
Class F2, 00000>  Passenger  Class F3, 000000>	37 52	36 71	44 73	44 73	2.75	2.75	.00	.0		
Passenger Class G2, 00OO>	3	1	33	33	2.75	2.75	.00	.0		
Class H3, 00 OOO > Passenger	7	7	45	45	2. 40	2. 45	. 05	2.1		
Local freight:	5	5	100	100	2. 90 2. 90	2. 90 2. 90	.00	0.0		
TWO-CYLINDER COMPOUND OR CROSS-COM-		•••••	•••••		2. 00	2. 00	.00	0.0		
POUND LOCOMOTIVES.  Class B4, OOOOo>	7	6	75	75						
Through freight: 140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2. 90 2. 90	3. 10 3. 20	.20	6. 9 10. 3		
Local freight: 140,000 to 270,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2.90	3. 25	. 35	12.1		
Passenger:	14	4	52	52	2.90	3. 35	. 45	15. 5		
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.60 2.60 2.60	2.60 2.60 2.60	.00	.0		
					2, 75	2.75	.00	.0		
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers Local freight:					2. 75 2. 75	2, 85 3, 00	.10	3. 6 9. 1		
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.75 2.75	2.90	. 15 . 25 . 40	5. 5 9. 1 <b>1</b> 4. 5		
100,000 to 140,000 pounds on drivers	•••••	*****			2.75	3.15	. 40	14.5		

#### BUFFALO, ROCHESTER & PITTSBURGH RY.

Class.	Num	ıber.	weig	erage ht on vers ns).	day miles hours	e per of 100 s or 10 or less emen.	Increase t	o firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
SINGLE-EXPANSION LOCOMOTIVES.									
Class A3, 000>	7	6	63	67					
Switching. Class B3, OOOo> Switching.	2	2	44	44	\$2.40		\$0.10	4. 2	
Class B4, 00000>	177	186	77	77	2.40		. 10	4.2	
Switching. Freight.					2.40 2.85	2.50	.10 .00	4.2	
Class B5, OOOOOo> Freight	8	8	122	122	2.95	3.00	.05	1.7	
Class C2, OO00>	6	5	34	35	2.40	2.45	.05	2.1	
Passenger Class C3, OOOoo> Passenger	15	15	51	52	2.40	2.50	. 10	4.2	
Freight Switching					2.85	2.85 2.50	.00	2.1	
Class C4, OOOOoo> Freight	50	34	66	67	2.85	2.85	.00	.0	
Switching.		28	109	109	2.40	2.85	.45	18.8	
Class E4, 000000> Freight. Class F2, 00000>	;:-				2.85	3.00	. 15	5. 3	
Passenger	15	15	49	51	2.40	2.70	.30	12.5	
Class F3, 000000> Passenger	3	7	82	83	2.40	2.70	.30	12. 5	
CENTRAL	NEW	ENG	LANI	D RY					
SINGLE-EXPANSION LOCOMOTIVES.									
Class A3, 000>	6	6	60	60					
Switching. Class A4, 0000>		3		101	\$2.40	\$2.50	\$0.10	4.2	
Switching				64		2. 50			
Through freight			64		2.65	3.00	. 35	13. 2	
Local freight. Class B4, 00000>	30	43	63	74	2.65	3. 15	. 50	18.9	
80,000 and less than 100,000 pounds					2.65	3.00	.35	13. 2	
100,000 and less than 140,000 pounds Local freight—					2.65	3. 20	. 55	20.8	
80,000 and less than 100,000 pounds on drivers					2.65	3. 15	. 50	18.9	
100,000 and less than 140,000 pounds on drivers.					2.65	3.35	.70	26. 4	
Class C2, OO00>	14	11	31	32	2.40	2.45	.05	2. 1	
Passenger Class C3, OOOoo> Passenger	7	7	52	52	2.40	2. 45	.05	2. 1	
Class F2, oOOoo> Passenger	1	1	31	31		2. 45	.05	2.1	
I assemger					2.40	2.40	.03	2.1	
CENTRAL RAILRO	OAD C	0. 01	NEV	V JEF	RSEY.				
SINGLE-EXPANSION LOCOMOTIVES.									
Class A3, 000>	93	101	64	65	\$2.65	\$2.65	\$0.00	0.0	
Class A4, OOOO> Switching.		10		115					
Class B3, 0000>	18	17	51	52		3.30			
Freight: 132,600 pounds on drivers					2.80 2.80	3.00	, 20	7.1	
93,500 pounds on drivers	•••••	• • • • • • •	• • • • • • •	• • • • • •	2.80	2.85	. 05	1.8	

#### CENTRAL RAILROAD CO. OF NEW JERSEY-Continued.

Class.	Nun	nber.	ber. Ave		Rate per day of 100 miles or 10 hours or less to firemen.		Increase to firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd.								
Class B4, 0000o>	106	106	63	63				
100,128 to 110,347 pounds on drivers				1	3, 25	\$3.00 3.25 2.85 3.30	\$0.20 .00 .05	7.1 0.0 1.8 1.5
Class C2, O'Ooo'>. Passenger: Runs exceeding 150 miles, per 100 miles. Less than 150 miles, per 100 miles or less. Class C3, O'Ooo>	60	58	38	39	2. 40 2. 50	2. 60 2. 60	.20	8. 3 4. 0
Passenger: Rums exceeding 150 miles, per 100 miles. Less than 150 miles, per 100 miles or less. Freight:						2. 60 2. 60	.20	8. 3 4. 0
68,330 and 71,008 pounds on drivers 145,000 pounds on drivers					2, 80	2, 80 3, 10	.00	0.0 10.7
158,800 pounds on drivers.  158,800 pounds on drivers.  Class C4, O O O O o >  Freight.	51			80	2.80 3.25	3. 00 3. 25	.20	7.1
Freight. Class E3, 00000>	25	25	66	66	3, 25	3.25	.00	0.0
Passenger: Runsexceeding 150 miles, per 100 miles. Less than 150 miles, per 100 miles or less. Class F2, 0000>		23			2. 40 2. 50	2. 60 -2. 60	. 20	8.3 4.0
Runs exceeding 150 miles, per 100 miles. Less than 150 miles, per 100 miles or less.					2. 40 2. 50	2.60 2.60	.20	8. 3 4. 0

#### CHICAGO, INDIANA & SOUTHERN R. R.

				1	1			į.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	33	33	71	71				
140,000 pounds or more on drivers					\$2.20	\$2,60	\$0.40	18, 2
Less than 140,000 pounds on drivers					2.20	2.50	. 30	13.6
Class A5, 00000>	2	2	135	135				
Switching. Class B4, 0000o>					2,20	2.60	. 40	18.2
Class B4, 00000>	76	76	103	103				
Freight.			28	29	2.95	3.30	. 35	11.9
Class C2, OO00>	8	, ,	28,	29	2.30	2,45	. 15	6.5
Passenger Freight					2.65	2.75	.10	3.8
Class C3, 00000>	25	27	57	57	2.00	2.10		0.0
Freight:	1							
60,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers Less than 20-inch cylinders						2.85		
100,000 to 140,000 pounds on drivers						3.00		
Less than 20-inch cylinders					2.65			
20-inch cylinders or over					2.95			
TWO-CYLINDER COMPOUND OR CROSS-								
COMPOUND LOCOMOTIVES.								
COMITOCIAD BOCOMOTIVES.						-		
Class C3, OOOoo>	2		56					
Freight					2.95			
		1						

CHICAGO, TERRE HAUTE & SOUTHEASTERN RY.

oniono, intil discontinuoni in										
Class.	Nun	nber.	weig dri	rage ht on vers ns).	day miles hours	e per of 100 or 10 or less emen.	Increase t	o firemen.		
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES.										
Class A4, 0000>		2		82		\$2,60				
Class B3, OOOo>	12	12	56	56						
Class B3, 00000> Switching. Class B4, 00000>	15	25	93	99	\$2. 25	2.50	\$0.25	11.1		
Freight	12	10	40	41	3.00	3.30	. 30	10.0		
Class C2, OO00> Passenger. Class C3, OO000>					2.30	2.50	. 20	8.7		
Freight.	24	24	49	49	2.60	3.00	. 40	15. 4		
	AMIT	TON	e DA	32003	t DV	1				
CINCINNATI, H	AMIL	ION	W DA	1101	N K1.		1			
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, OOO>	52	50	49	49						
Switching:	32	30	40	40				*********		
First-class yards					\$2.40 2.34	\$2.50 2.50	\$0.10 .16	4. 2 6. 8		
Class B3, 000o>	13	13	43	43						
Less than 80,000 pounds on drivers					2.75	2.75	.00	.0		
On drivers.	55	55	82	82	2.75	2. 85	. 10	3.6		
Freight: 600 class engines.					3.00					
400 class engines weighing over— 140,000 pounds on drivers					2.95					
140,000 to 170,000 bottles off				• • • • • •		2. 85				
170,000 to 200,000 pounds on						3. 10		• • • • • • • • • • • • • • • • • • • •		
drivers	40	28	27	28		3. 20				
Passenger: Northern and Southern division					2.40	2.45	. 05	2, 1		
Northern and Southern division.  Indianapolis division.  Wellston division.  Springfield division.  Delphos division.  Fort Wayne division.  Class C3, 0000>  Passenger					2.40	2.45	. 05	2. 1		
Springfield division					2. 40 2. 34	2. 45 2. 45	.05	2. 1 4. 7		
Delphos division					2. 10 2. 10	2. 45 2. 45	.35	16. 7 16. 7		
Class C3, OOOoo>	81	81	50	50						
Passenger Freight:					2.40	2.60	. 20	8.3		
					2. 95 2. 75					
Less than 80,000 pounds on drivers					2.10	2.75				
80,000 to 100,000 pounds on drivers						2. 85 3. 00				
Less than 140,000 pounds on drivers. Less than 80,000 pounds on drivers. 80,000 to 100,000 pounds on drivers. 100,000 to 140,000 pounds on drivers. Class F3, 0 O O O o > Passenger.	5	5	69	69	2. 40	2.60	. 20	8.3		
1 assenger							. 20	8. 3		
CINCINNATI, LE	BANC	)N &	NOR'	THER	N RY					
SINGLE-EXPANSION BOCOMOTIVES.										
Class A3, 000> Switching: First-class yards	3	4	62	59	\$2,50	\$2,60	\$0.10	4.0		
First-class yards. Second-class yards Class B3, OOOo>		4	65	63	2. 50	2. 50	. 00	.0		
Class B3, 0000>  Passenger  Class B4, 00000>	2				2.58	2.60	.02	.8		
		8	52	52						
Under 100,000 pounds on drivers 100,000 pounds or over on drivers Class C2, OOoo>		• • • • • •			2.85 2.85	3. 00 3. 15	. 15	5.3 10.5		
Class C2, OOoo>	1	1	32	31						
Passenger				• • • • • •	2.58	2.58	.00	0.0		

#### CINCINNATI NORTHERN R. R.

Class.	Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less to firemen.		Increase to firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.  Class B3, OOOo> Local freight: Between Lewisburg and Franklin and Hudson and Jackson. Between Van Wert and Lewisburg and Van Wert and Hudson. Extra freight Switching. Class B4, OOOOo> Through freight: Engines with 20-inch cylinders and	5	10		39	\$2. 45 2. 60 2. 63 2. 20	\$2.85 3.00 2.50	\$0.40 .40	16. 3 15. 4 13. 6
Over All other engines Class C2, OOoo>			37	27	2. 90 2. 63	3.35	. 45 . 57	15.5 21.7
Passenger Class C3, OOOoo>		10	50	50	2. 18	2.45	. 27	12. 4
Local freight:  Local freight:  Between Lewisburg and Franklin and Hudson and Jackson  Between Van Wert and Lewisburg and Van Wert and Hudson.  Extra or through freight.				50	2. 45 2. 60 2. 63	2.85	.40	16. 3 15. 4

#### CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS RY.

					6			
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>		1	31	31				
Switching	164	182	64	66.	\$2.25	\$2.50	<b>\$0.25</b>	11. 1
Class A3, OOO>	104	102	04	00.				
140,000 pounds or over on drivers					2. 25	2.60	. 35	15.6
Less than 140,000 pounds on drivers			70	70	2. 25	2.50	. 25	11.1
Class A5, 00000>	2	2	10	10	2, 25	2,60	. 35	15, 6
Class B3, 000o>	45	31	43	43				
Freight					2.70 2.25	2, 85	. 15	5.6
Switching Passenger					2. 20	2,50		
Class B4, 0000o>	321	320	100	98				
Freight:					2, 95	3, 00	. 05	1. 7
100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers						3, 10	. 15	5, 1
170,000 to 200,000 pounds on drivers					2.95	3. 20	. 25	8. 5
200,000 to 250,000 pounds on drivers	Fe1		32		2. 95	3.30	. 35	11.9
Class C2, OOoo>	203	01	32	32				••••••
Less than 80,000 pounds on drivers					2.30	2.45	. 15	6.5
80,000 to 100,000 pounds on drivers	100			56	2.30	2.50	. 20	8. 7
Class C3, OOOoo>	100	115				2,60	.30	13. 0
Freight					2. 70	3.00	.30	11. 1
Switching					2. 25	2.50	. 25	11. 1
Class E4, oOÖOOo> Freight		42		104		3, 30		
Class F2, 00000>	60	60	51	51				
Passenger				73	2.40	2.60	. 20	8.3
Class F3, 000000>			73	73	2, 40	2, 70	.30	12.5
1 dooding of					-, 10			12,0

DAYTON & UNION R. R.									
Class.	Nu	mber.	weig	erage ght on ivers ons).	day mile hours	e per of 100 s or 10 s or less emen.	Increase t	to firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
THE TWO WAYS A COMOTIVES	-							-	
SINGLE-EXPANSION LOCOMOTIVES.	. 5	-	27	07					
Class C2, OOoo>	1	5		27	\$1.75	\$2.45	\$0.70	40.0	
Passenger Class C3, OOOoo> Local freight	1	1	5-1	54	2.50	3.15	.65	26.0	
DELAW	ARE	& HU	DSON	CO.					
SINGLE-EXPANSION LOCOMOTIVES.									
Class A2, 00>	1		31						
Conitabing	41	44	75	64	\$2.50				
Class A3, 000> Switching Class B3, 000o>	32	27	50	50	2.50	\$2.50	\$0.00	0.0	
Freight		286	86		2.60	3.00	. 40	15.4	
Class B4, 0000o> Freight—	200	285	80	87			•••••		
140,000 to 170,000 pounds on drivers					2.85 3.00	3. 10 3. 20	. 25	8.8 6.7	
All other engines. Class C2, O Ooo>	55	51	43	43	3.00	3.30	.30	10.0	
Passenger	38	44	67	67	2.50	2.50	.00	0.0	
Passenger	1	1	16	16	2.50	2.70	. 20	8.0	
Class H1, 00Oo> Passenger		1	10	10	2.50	2.50	.00	0.0	
FOUR-CYLINDER COMPOUND LOCOMOTIVES.									
Class A8, 00000000>(Mallet)	10	13	227	229					
Freight					3.00	3.00	.00	0.0	
DELAWARE, LACI	KAWA	NNA	& W	ESTE	RN R.	R.			
SINGLE-EXPANSION LOCOMOTIVES.									
Class A2, OO>	1	2	35	40					
Switching	125	133	65	65	\$2.40	\$2.50	\$0.10	4.2	
Class A3, 000>	9	21	103	102	2.40	2.50	. 10	4.2	
Class A4, 0000> Switching					2.60	2.60	.00	.0	
Class B3, OOOo> Through freight	138	119	61	63	2.65	2.85	. 20	7.5	
Way freight or pick-up.  Class B4, 00000>	260	259	82	82	2.65	3.00	.35	13.2	
Through traight					2.90 2.90	3. 10 3. 25	.20	6.9 $12.1$	
Way freight or pick-up Class C2, OOoo> Passenger	112	101	46	46	2.40	2.50	.10	4.2	
Class C3, 00000>	65	57	67	72					
Passenger Class C4, OOOOoo> Through freight	20	20	79	79	2.50	2.60	.10	4.0	
Through freight.					2.90 2.90	3.10	. 20 . 35	6.9 12.1	
Way freight or pick-up. Class E4, 000000> Through freight		27		118		3.30			
Way freight or pick-up.	2	01				3.45			
Passenger	2	21	86	92	2.50	2.85	. 35	14.0	
Through freight						3. 20 3. 35			
Way freight or pick-up		1		19		2 45			

DETROIT,	TOLEDO	& IRONTON	R. R.
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DETROIT, TOUBDO & INONTON II. II.									
Class.	Nun	ıber.	weig	rage ht on vers ns).	day of miles	e per of 100 or 10 or less emen.	Increase t	o firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
SINGLE-EXPANSION LOCOMOTIVES.									
Class A2, 00>	1	1	26	26	00.50	en 50	80.00		
Switching Class A3, 000> Switching.	3	3	50	50	\$2.50	\$2.50	\$0.00	0.0	
Switching. Class B3, OOOo>	20	7	51	53	2.50	2.50	.00	.0	
Switching					2.50 3.15	2.50 3.15	.00	.0	
Class B4, 00000>	39	35	132	82					
Class B3, OOOo> Switching. Local freight Class B4, OOOOo> Switching. Local freight Freight.					2.50 3.15	2.50 3.15	.00	.0	
Freight: 140,000 to 170,000 pounds on drivers	1				3.10	3.10	.00	.0	
170,000 to 200,000 pounds on drivers		9	28	28	3.20	3.20	.00	.0	
Class C2, OOoo> Passenger		9			2.45.	2.45	.00	.0	
Class C3, OOOoo> Switching. Local freight	13	9	50	54	2.50	2.50	.00	.0	
Local freight					3.15	3.15	.00	.0	
DUNKIRK, ALLEGHE	NY VA	LLE	Y & P.	ITTSE	BURG	H R. 1	R.		
SINGLE-EXPANSION LOCOMOTIVES.									
Class B3, 000o>	2	2	46	49					
Passenger— Per round trip					\$3.60				
100,000 to 140,000 pounds on drivers 80,000 to 100,000 pounds on drivers						\$2.60 2.50			
Freight—					2.55		\$0.45	17.0	
100,000 to 140,000 pounds on drivers 80,000 to 100,000 pounds on drivers					2.55	3.00 2.85	.30	17.6 11.8	
Class C3, OOOoo>		. 9	48	48					
100,000 to 140,000 pounds on drivers 80,000 to 100,000 pounds on drivers						2.60 2.50			
Per round trip					3.60	2.00			
Freight— 100,000 to 140,000 pounds on drivers					2.55	3.00	.45	17.6	
80,000 to 100,000 pounds on drivers					2.55	2.85	.30	11.8	
	ERIE	R. R.							
SINGLE-EXPANSION LOCOMOTIVES.									
Class A3, OOO>	150	128	64	65					
Switching— 150,000 pounds or over on drivers					\$2.50	\$2.60	\$0.10	4.0	
150,000 pounds or over on drivers Less than 150,000 pounds on drivers. Class B3, OOOo>	19	20	47	47	2.35	2.50	.15	6.4	
Passenger— Suburban.					2.40	2.60	.20	8.3	
Other Freight					2.30	2.60	. 30	13.0	
Switching—	1				2.60	3.00	.40	15.4	
Less than 140,000 pounds on drivers  Over 140,000 pounds on drivers  Class B4, 00000>					2.35 2.35	2.50 2.60	.15	6.4 10.6	
Class B4, OOOOo> Passenger—	755	618	80	80					
80,000 to 100,000 pounds on drivers						2.50			
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers						2.60 2.70			
170,000 to 200,000 pounds on drivers Freight—						2.85			
§0.000 to 100.000 nounds on drivers					2.60 2.60	2.85 3.00	. 25 . 40	9.6 15.4	
100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2.95	3.10	. 15	5.1	
Switching—	1	l .			2.95	3.20	. 25	8.5	
Less than 140,000 pounds on drivers Over 150,000 pounds on drivers					2.35 2.50	2.50	.15	6.4	

ERIE R. R.—Continued.

Class   Number   Nu		,								
SINGLE-EXPANSION LOCOMOTIVES—contd.   Class B3, OOO OOO	Class.	Nun	Number.		weight on drivers		of 100 or 10 or less	Increase t	o firemen.	
Class B., OOOOOO>		1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
Class B., OOOOOO>	SINCLE EVEN NSION LOCOMOTIVES CONTA									
Switching	Close R5 000000	6	6	87	87					
Strict   140,000 pounds on drivers	Switching					<b>2.50</b>	\$2.60	\$0.10	4.0	
Strict   140,000 pounds on drivers	Class C2, 0000>	82	74	38	38	2 40	2 50	10	4.9	
Strict   140,000 pounds on drivers	All other passenger					2.30	2.50	. 20	8.7	
Strict   140,000 pounds on drivers	Freight.						2.85			
Class C3, OOO000   Country   Count	Less than 140 000 pounds on drivers									
All other passenger	Over 140,000 pounds on drivers	100	170				2.60			
All other passenger	Suburban passenger	198	170	59	59	2,40				
\$\text{80,000 to 140,000 pounds on drivers.} \tag{2.50} \tag{50} \tag{140,000 to 140,000 pounds on drivers.} \tag{2.60} \tag{50} \tag{2.70} \tag{50} \tag{140,000 to 170,000 pounds on drivers.} \tag{2.60} \tag{2.70} \tag{50} \tag	All other passenger					2.30				
Freight	Passenger— 80 000 to 100,000 pounds on drivers						2,50			
Freight	100,000 to 140,000 pounds on drivers						2.60			
S0,000 to 100,000 pounds on drivers					• • • • • •		2.70			
Less than 140,000 pounds on drivers   2.35   2.50   .15   6.4	80,000 to 100,000 pounds on drivers					2.60	2.85	. 25	9.6	
Less than 140,000 pounds on drivers   2.35   2.50   .15   6.4	100,000 to 140,000 pounds on drivers					2.60	3.00	.40	15.4	
Less than 140,000 pounds on drivers					• • • • • •	2.00	3.10	. 50	19.2	
Class F1, 0000   1	Less than 140,000 pounds on drivers					2.35				
Class F1, 0000   1	Over 140,000 pounds on drivers	35	155	118	118	2.35	2.60	. 25	10.6	
Class F2, 00000>   55   57   42   42   42   42   42   42   42   4	Freight					3.25	3.30	.05	1.5	
Class F2, 00000>   55   57   42   42   42   42   42   42   42   4	Class F1, 0000>	1	1	9	9	0.20	0.45			
140,000 to 170,000 pounds on drivers   2.40   2.70   30   12.5   170,000 to 200,000 pounds on drivers   2.40   2.85   45   18.8   18.8   140,000 to 170,000 pounds on drivers   3.10   3.10   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20	Class F2. 00000>	55	57	42	42	2.30	2.45			
140,000 to 170,000 pounds on drivers   2.40   2.70   30   12.5   170,000 to 200,000 pounds on drivers   2.40   2.85   45   18.8   18.8   140,000 to 170,000 pounds on drivers   3.10   3.10   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20	Suburban passenger					2.40		. 20	8.3	
140,000 to 170,000 pounds on drivers   2.40   2.70   30   12.5   170,000 to 200,000 pounds on drivers   2.40   2.85   45   18.8   18.8   140,000 to 170,000 pounds on drivers   3.10   3.10   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20	All other passenger								13.0	
140,000 to 170,000 pounds on drivers   2.40   2.70   30   12.5   170,000 to 200,000 pounds on drivers   2.40   2.85   45   18.8   18.8   140,000 to 170,000 pounds on drivers   3.10   3.10   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20	Class F3, 0000000>	59	81	75	82					
170,000 to 200,000 pounds on drivers						2 40	2 70	30	19.5	
140,000 to 170,000 pounds on drivers   3.10   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.20   3.2	170,000 to 200,000 pounds on drivers							. 45		
Class C2, OOoo>	Freight —						3 10			
Class C2, OOoo>	170,000 to 200,000 pounds on drivers						3.20			
Class C2, OOoo>	Class H2,00000>	1		33						
Class C2, OOoo>	Switching					2.35				
All other passenger					00					
All other passenger	Suburban passenger	1	1	39	39	2.40	2.50	.10	4.2	
Less than 140,000 pounds on drivers       2.50         Over 140,000 pounds on drivers       2.60         Class C3, OOOoo>       10         Suburban passenger       2.40         All other passenger       2.30         Passenger—       2.50         80,000 to 100,000 pounds on drivers       2.50         100,000 to 140,000 pounds on drivers       2.60         140,000 to 170,000 pounds on drivers       2.70         Freight—       80,000 to 100,000 pounds on drivers       2.60         100,000 to 140,000 pounds on drivers       2.60         100,000 to 170,000 pounds on drivers       2.60         Switching—       2.60         Less than 140,000 pounds on drivers       2.35         Over 140,000 pounds on drivers       2.35         0ver 140,000 pounds on drivers       2.35         2.50       15         6.4       0ver 140,000 pounds on drivers         2.35       2.60         3       2.35         2.50       2.5         9.6       3.0         1.0       2.25         2.60       3.10         5.0       1.5         6.4       2.60         2.55       2.50         1.5	All other passenger							.20		
Over 140,000 pounds on drivers.         10         10         77         77         2.40	Less than 140 000 nounds on drivers						2 50			
Passenge	Over 140,000 pounds on drivers									
Passenge	Class (3, 00000>	10	10	77	77	2 40				
Passenge	All other passenger.									
Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Sect							0.50			
Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Sect	100,000 to 140,000 pounds on drivers									
Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Sect	140,000 to 170,000 pounds on drivers						2.70			
Switching	Prejent-	1				2 60	2 85	25	9.6	
Switching	100,000 to 140,000 pounds on drivers					2.60	3.00	.40	15.4	
Less than 140,000 pounds on drivers   2,35   2,50   15   6,4     Over 140,000 pounds on drivers   2,35   2,60   25   10,6     Class F2, 00000>						2.60	3.10	. 50	19.2	
Class As, 00000000> Mallet. 3 3 205 205	Less than 140,000 pounds on drivers									
Class As, 00000000> Mallet. 3 3 205 205	Over 140,000 pounds on drivers			277		2.35	2.60	. 25	10.6	
Class As, 00000000> Mallet. 3 3 205 205	Suburban passenger	3	1	07	07		2.60	.20	8.3	
Class As, 00000000> Mallet. 3 3 205 205	All other passenger						2.60	. 30	13.0	
Pusher per (per day of 6 hours)	Class A8, 00000000 Mallet	3	3		205		3.00			
Pusher. 1 1 1 167 167 3.95 4.00 05 1.3	Pusher per (per day of 6 hours)				1	2.70	2.70	.00	.0	
1.0	Pusher	1	1	167	167	3 95	4.00	05	1.3	
		1				0.00	1.00	.00	1	

GRAND RAPIDS & INDIANA	RY.
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· Class.	Nun	nber.	weig dri	erage ht on vers ns).	miles hours	è per of 100 or 10 or less emen.	Increase t	o firemen.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	1	8	72	72	\$2.30	\$2.60	\$0.30	13.0
Class B3, OOOo>	6	6	72	72	2.95	3. 10	.15	5. 1
Local freight Class B4 00000	46	46	62	68	2.75	3. 25	. 50	18. 2
Class B3, OOOo> Through freight Local freight Class B4, OOOo> Through freight Local freight Local freight					2.75 2.95			
						2.00		
100,000 to 140,000 pounds on drivers. 140,000 to 170,000 pounds on drivers. 170,000 to 200,000 pounds on drivers.						3.00 3.10 3.20		
Local treight:	1		1			3. 15		
100,000 to 140,000 pounds on drivers. 140,000 to 170,000 pounds on drivers. 170,000 to 200,000 pounds on drivers.						3. 25		
Switching.	1				2.30	2, 60	.30	13.0
Second-class yards	11	11	20	31	2.30	2.50	.20	8.7
First-class yards Second-class yards Class C2, O000> Passenger		11			2.40	2.45	.05	2.1
Passenger	20	20	56	56	2.40	2.60	.20	8.3
r assenger Class C3, OOOoo> Passenger Local freight Through freight					2.75 2.95	3.15 3.00	.40	14.5
				1			<u> </u>	
HOCK SINGLE-EXPANSION LOCOMOTIVES.	ING V	ALLI	EY R	Y.				
SINGLE-EXPANSION LOCOMOTIVES.	34	7ALLI	EY R.	Y. 60				
SINGLE-EXPANSION LOCOMOTIVES.	34				\$2.40	\$2.60	\$0.20 10	8.3
SINGLE-EXPANSION LOCOMOTIVES.	34				\$2.40 2.40	2.50	\$0.20 .10	8.3 4.2
single-expansion locomotives.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight Class B4, 0000>	34		60					
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards Second-class yards Class B3, 0000> Freight Class B4, 00000> Switching:	34	34	60 48 79	60	2.40	2. 50 2. 90 2. 60	. 10	8.3
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2.40 2.40 2.40	2.50	. 10	4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2.40	2. 50 2. 90 2. 60 2. 50	. 10	8.3
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2. 40 2. 40 2. 40 2. 95	2. 50 2. 90 2. 60	. 10	8.3
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2. 40 2. 40 2. 40 2. 95	2. 50 2. 90 2. 60 2. 50 3. 00	. 10	4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2. 40 2. 40 2. 40 2. 95 2. 90	2. 50 2. 90 2. 60 2. 50 3. 00 3. 30	.10	8.3 4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2.40 2.40 2.40 2.95 2.90	2. 50 2. 90 2. 60 2. 50 3. 00 3. 30 2. 50	.10	8.3 4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, OOO> Switching: First-class yards. Second-class yards. Class B3, OOOo> Freight. Class B4, OOOoo> Switching: First-class yards. Second-class yards. Freight:	34	34	60 48 79	60	2. 40 2. 40 2. 40 2. 95 2. 90	2. 50 2. 90 2. 60 2. 50 3. 00 3. 30 2. 50 2. 70	.10	8.3 4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards. Second-class yards. Class B3, 0000> Freight. Class B4, 0000o> Switching: First-class yards. Second-class yards. Freight:	34 	92 	60 	60 	2. 40 2. 40 2. 40 2. 95 2. 90	2. 50 2. 90 2. 60 2. 50 3. 00 3. 30 2. 50 2. 70 2. 60	.10	8.3 4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, OOO>. Switching: First-class yards Second-class yards Class B3, OOOO> Freight  Class B4, OOOOO> Switching: First-class yards. Second-class yards. Second-class yards. Large consolidation engines. Large consolidation engines. 100,000 to 140,000 pounds on drivers. 200,000 to 250,000 pounds on drivers. Class C2, OOOO> Passenger Class C3, OOOO> Passenger Class E4, OOOOO> Switching. Freight.	34 	92 	60 	60 	2. 40 2. 40 2. 40 2. 95 2. 90	2. 50 2. 90 2. 60 2. 50 3. 00 3. 30 2. 50 2. 70 2. 60	.10	8.3 4.2
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, 000> Switching: First-class yards Second-class yards Class B3, 000> Freight Class B4, 0000> Switching: First-class yards Second-class yards Second-class yards Freight: Engines over 20-inch cylinders Large consolidation engines 100,000 to 140,000 pounds on drivers 200,000 to 250,000 pounds on drivers. Class C2, 000o> Passenger Class C3, 000oo> Passenger Class C4, 00000> Switching Freight  INDIANA  SINGLE-EXPANSION LOCOMOTIVES.	34 1 93 15 3 3 HARI	92 	60 	60 	2. 40 2. 40 2. 40 2. 95 2. 90 2. 35 2. 35	2. 50 2. 90 2. 60 2. 50 3. 30 2. 50 2. 70 2. 60 3. 30	.10	8.3 4.2 6.4 14.9
SINGLE-EXPANSION LOCOMOTIVES.  Class A3, OOO>. Switching: First-class yards Second-class yards Class B3, OOOO> Freight.  Class B4, OOOOO> Switching: First-class yards Second-class yards Second-class yards Treight: Engines over 20-inch cylinders Large consolidation engines 100,000 to 140,000 pounds on drivers 200,000 to 250,000 pounds on drivers Class C2, OOoo> Passenger Class C3, OOOOO> Passenger Class E4, OOOOO> Switching Freight.  INDIANA	34 1 93 15 3 3 HARI	34 92 92 12 7 11 11 33 GOR I	60 48 79 79 71 45 T1	60 79 45 71 122 R. R. R. R.	2. 40 2. 40 2. 40 2. 95 2. 90	2. 50 2. 90 2. 60 2. 50 3. 30 2. 50 2. 70 2. 60 3. 30	.10	8.3 4.2

INDIANAPOLIS UNION RY.

INDIANA	APOL	IS UN	ION I	RY.							
Class.	Nun	Number.		erage ht on vers ns).	Rate per day of 100 miles or 10 hours orless to firemen.		Increase t	o firemen.			
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.			
SINGLE-EXPANSION LOCOMOTIVES.											
Class A3, 000>	21	21	70	70	\$2. 25	\$2.85	\$0.60	26.7			
KANAWHA & MICHIGAN RY.											
SINGLE-EXPANSION LOCOMOTIVES.											
Class A3, 000>	8	8	62	62	89 40	89 50	\$0.10	4.0			
Class B3, OOOo>.	11	2	45	46				4, 2			
Class B4, 00000>	36	46	75	73	2.76	2. 80	.09				
Freight:					2.76 2.76	3.00	. 24	8.7			
140,000 to 170,000 pounds on drivers		10	20		2.95	3. 10 3. 30	.34	12.3 11.9			
Passenger		10	99	43 83	2.19	2.50	.31	14. 2			
Mine runs.					3.05			14.8			
LAKE ERIE, AL	LIAN	CE &	WHE	ELIN	G RY						
SINGLE-EXPANSION LOCOMOTIVES.											
Class B4, 00000>	19		98		£2. 75						
LAKE SHORE &	MICH	IGAN	sou	THER	NR.	R.	1	-			
SINGLE-EXPANSION LOCOMOTIVES.											
Class A3, 000>	258	235	69	72							
Switching, less than 140,000 pounds: First-class yards Second-class yards					\$2.30	\$2.50	\$0, 20	8.7			
All other words					2. 20	2.50 2.50	.30	13. 6 19. 0			
öwitching, over 140,000 pounds: First-class yards. Second-class yards. All other yards. Class A4, 0000> Switching. Class A5, 00000>					2. 30	2. 60	.30	13, 0			
Second-class yards					2. 20 2. 10	2.60 2.60	. 40	18. 2 23. 8			
Class A4, 0000>		20		120							
Class A5, OOOOO>	8	8	135	135							
First-class yards					2.30 2.20	2. 60 2. 60	.30	13. 0 18. 2			
All other yards  Class B4, QOOOo>	421	376	0.1	93	2. 10	2.60	. 50	23.8			
Through freight: 140,000 to 170,000 pounds on drivers						3. 10	. 15	5. 1			
200,000 to 250,000 pounds on drivers Local freight—main line:					2. 95	3. 30	.35	11.9			
140,000 to 170,000 pounds on drivers 200,000 to 250,000 pounds on drivers Switch runs:					3. 00 3. 00	3. 25 3. 45	. 25 . 45	8.3 15.0			
140,000 to 170,000 pounds on drivers 200,000 to 250,000 pounds on drivers					2.95 2.95	3. 10 3. 30	. 15 . 35	5. 1 11. 9			
Local freight—all other divisions: 140,000 to 170,000 pounds on drivers					2. 70 2. 70	3. 25 3. 45	.55	20. 4 27. 8			
200 000 to 250 000 pounds on drivers											
200,000 to 250,000 pounds on drivers Class C2, O'000> Passenger: Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers	14	13	35	35	2. 10						

LAKE SHORE & MICHIGAN SOUTHERN R. R.—Continued.

Class.	Nun	aber.	weigl driv	rage ht on vers ns).	day	e per of 100 or 10 or less emen.	Increase t	o firemen.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES—contd.								
Class C3, OOOoo>	99	75	48	51				
Passenger: 80,000 to 100,000 pounds on drivers					32. 40	\$2.50	\$0.10	4.2
100,000 to 140,000 pounds on drivers Through freight—Main line, Franklin division and Grand Rapids Branch:					2.40	2.60	. 20	8.3
division and Grand Rapids Branch: 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					3.00	3.00	.00	.0
					3.00	3.00	.00	.0
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2. 70 2. 70	2.85	.15	5, 6 11, 1
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers Local freight—Main line, Franklin division and Grand Rapids Branch:								
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					3.00	3.00	.00	5.0
All other divisions:	1				1	3,00	.30	11.1
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers Switch runs:	1				2.70	3. 15	. 45	16. 7
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers Class E3, 0000o>						2. 85 3. 00		
Class E3, 00000> Passenger:	73	77	73	75				
100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers					2.40	2, 60	.20	8.3 12.5
170 000 to 200 000 nounds on drivers	1			116	2. 40	2. 70 2. 85	. 45	18. 8
Class E4, 000000>.  Through freight, 200,000 to 250,000 pounds on drivers.		05		110		3. 30		
Local freight, 200,000 to 250,000 pounds						3. 45		
on drivers.  Class F2, 00000> Passenger.	10	10	46	47	2.40	2, 50	10	4.2
Class F3, 000000>	105	110	85	85	2.40	2. 30	.10	4. 2
Passenger: 140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2. 40	2.70	.30	12.5
					2.40	2.85	. 45	18.8
FOUR-CYLINDER COMPOUND LOCOMOTIVES.								
Class 000-0000> Switching.		3		233		4.00		
I A WE IND	112 6	THEOL	PED M	D 1	1	<u> </u>	1	1
LAKE ER	IE &	1 1215	1211-4	IV. I		1	1	1
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	1	26	58	61				
140,000 pounds and over on drivers. Less than 140,000 pounds on drivers. Class B3, 0000>					\$2.20 2.20	\$2.60 2.50	<b>\$0.40</b>	18. 2 13. 6
Class B3, OOOo> Freight	40	39	46	46	2.65	2.85	. 20	7.5
Class B4, 0000o>	. 45	45	87	86	2.00			
140,000 to 170,000 pounds on drivers.					2.95 2.95	3.10 3.20	.15 .25	5.1 8.5
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers 200,000 to 250,000 pounds on drivers Class C2, O'Ooo>	97	26	40	41	2.95	3.30	.35	11.9
Passenger—	1				2. 20	2.45	.25	11.4
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers Class C3, OOOoo>	19	14	49	45	2.20	2.43	.30	13.6
Passenger—					1	2, 50	.30	13.6
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.20		.40	18.2

Class.		Number.		Average weight on drivers (tons).		e per of 100 or 10 orless emen.	Increase to firemen	
	1912	1914	1912	1914	1912	1914	Amount	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	1	1	48	48	\$2.50	82.50	\$0.00	0.0
Switching. Class A3, OOO>	59	67	47	50	\$2.50		30.00	0.0
Switching	54	69	83	83	2.50	2.50	.00	.0
Class A4, 0000>			00		2.60	2.60	.00	.0
Class B3, OOOo>	19	11	58	69	2.75	3.00		9.1
Switching					2.50	2.50	.00	.0
Class B4, 00000> Freight	261	269	77	79	2, 95	3. 20	. 25	8.5
Switching					2.50	2.50	.00	.0
Class C2, OOoo> Passenger	72	56	36	36	2.45	2.50	.05	2.0
Freight					2. 75	2.85	.10	3.6
Switching. Class C3, OOOoo>	900	281	64	65	2.50	2.50	.00	.0
Passenger.					2.45	2.70	. 25	10.2
Freight					2.85	3.10	. 25	8.8
Switching. Class C4, OOOOoo>			47	. 52	2. 59	2.50	.00	.0
Freight					2.75	2.85	.10	3.6
Switening. Class E3, 00000>					2.50	2.50	.00	.0
Passenger					2.45			
Class E4, 00000o>	47	114	89	104				
177,610 pounds on drivers					2.95	3.20	. 25	
Over 177,610 pounds on drivers			47	47		3.30		
Passenger					2.45	2.50	.05	2.0
Freight. Switching.						2.85 2.50		
Class F3, 000000>	17	26	77	78				
Passenger Class ooOoo>			13	13	2.45	2.70	. 25	10.2
Passenger	1	1			2.45	2.50	. 05	2.0
			1		1		l	

#### LONG ISLAND R. R.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>		30	54	55				
Switching					\$2.50		\$0.00	0.0
Freight Class B4, 0000o>	16	16	61	60		3.00		
Freight					3.00	3. 15	. 15	5.0
Work					2.75			
Class C2, OOoo>	92	88	54	55	2.50	2, 50	.00	
Passenger					3, 00	3, 00	.00	.0
Work					2.75	2.75	.00	.0
Class C3, 00000>			60	61				
Passenger Freight					2.50	2.60	.10	4. 0 5. 0
Work.					3.00	3. 15 2. 85	. 15	3. 6
Class F?, 00000>	4	4		47	2. 10	2.00	.10	0.0
Passenger					2.50	2.50	.00	.0
Freight					3.00			
	1				}	1		

MAINE CENTRAL R. R.

MAIN	L ()	4 T T011	11 10.	10.				
Class.	Nur	nber.	weig	erage ght on ivers ons).	day miles hours	e per of 100 or 10 or less emen.	Increase t	o firemen.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.	17	177						
Class A2, OO>	17	17	54	54				
First-class yards Second-class yards				.	\$2.20	\$2.50	\$0.30	13.6
Second-class yards	18	12	52	54	2.15	2.50	. 35	16.3
Class B3, OOOo> Passenger	40	40			2.40	2.60	.20	8.3
Transparted ant—			1	1		2 00		
100 miles or less					2.65 $2.85$	3.00	. 35	13. 2 5. 3
Local freight—					2 00			
Local freight— 100 miles or less 100 miles and less than 120 miles					2.90 3.05	3. 15	. 25	8. 9 3. 3
								0.0
First-class yards. Second-class yards. Class B4, 0000o> Through freight—					$2.20 \\ 2.15$	$2.50 \\ 2.50$	.30	13.6
Class B4, 00000>	16	28	85	86	2.10	2.50	. 35	16.3
Through freight—							00	40.0
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					2.80 3.00	3. 10 3. 20	.30	10. 7 6. 7
Local freight—	ĺ		1	1				
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers Class C2, OOo>	••••				3.05	3. 25	. 20	6.6
Class C2, O O 00 >	62	51	34	35	3.20	0.00	, 15	4. 7
rassenger—						2 4-	0."	0.1
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers					2.40 $2.40$	$2.45 \\ 2.50$	.05	$\frac{2.1}{4.2}$
Switching			1	1				
First-class yards Second-class yards		• • • • • •			$2.20 \\ 2.15$	$\begin{bmatrix} 2.50 \\ 2.50 \end{bmatrix}$	.30	13. 6 16. 3
Through freight—		i	1			2.00	. 35	10. 3
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers					2.65	2.75	.10	3.8
						2.85	.00	.0
Less than 80,000 pounds on drivers  80,000 to 100,000 pounds on drivers  Class C3, OOoo>  Passenger—					2.90	2.90	.00	.0
80,000 to 100,000 pounds on drivers	58	56	64	65	3.05	3.05	.00	.0
Passenger—	90	90	04	05				
Less than 80,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers					2.40	2.45	. 05	2.1
140,000 to 140,000 pounds on drivers					2.40	$\begin{bmatrix} 2.50 \\ 2.60 \end{bmatrix}$	.10	4. 2 8. 3
Through freight—				1				
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers				,	2.65 2.85	$\begin{bmatrix} 2.75 \\ 2.85 \end{bmatrix}$	.10	3.8
Local freight—								.0
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.90 3.05	2.90	.00	.0
100,000 to 140,000 pounds on drivers					3.05	3. 15	.10	3.3
Switching. Class E3, 0000o>								
Class E3, 0000o> Switching—	1	1	42	42	•••••	••••••		
First-class yards					2.20	2.50	.30	13.6
Switching— First-class yards. Second-class yards. Class E4, 00000> Through freight. Local freight. Class F3, 00000> Passenger—	• • • • • •			107	2.15	2.50	.35	16.3
Through freight						3.30		
Local freight.	10	10	70	71		3. 45		
Passenger—	10	10	10	/1	• • • • • •		• • • • • • • • • • • • • • • • • • • •	
Passenger— 100,000 to 140,000 pounds on drivers					2.40	2.60	.20	8.3
Class G2, 000 0>	1	····i	31	31	2.40		.30	12.5
Switching								10.0
Switching— First-class yards————————————————————————————————————					2. 20 2. 15	2.50	.30	13. 6 16. 3
4-CYLINDER COMPOUND LOCOMOTIVES.					2. 20	2. 30	100	20.0
Class B3, OOOo>	1	1	55	55				
Through freight—			00	00				
100 miles or less					2.65   2.85	3.00	.35	13. 2 5. 3
Local freight—	-							
100 miles or less 100 miles and less than 120 miles					2.90 3.05	3. 15 3. 15	.25	. 8.6 3.3
Class E6, 00000000>	4	4	131	131				
Through freight					2.80	3.00	.20	7.1
Local freight	•••••	• • • • •	• • • • • •	•••••	3. 05	3. 15	.10	3.3

MICHIGAN CENTRAL R. R.

Class.	Nun	nber.	weig dri	erage ht on vers ns).	Rate per day of 100 miles or 10 hours or less to firemen.		Increase t	to firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
SINGLE-EXPANSION LOCOMOTIVES.									
Class A2, OO>	10		30						
Switching: First-class yards					\$2,30				
Second-class yards					2.20				
Third-class yards. Class A3, 000>	159	206	65	68	2.10				
Class A3, OOO> Switching: First-class yards Second-class yards. Third-class yards. Class A5, OOOOO> Switching. Class B3, OOOo> Through freight:	100	200	00						
First-class yards					2.30 2.20	\$2.60 2.50	<b>\$0.</b> 30	13. 0 13. 6	
Third-class yards					2. 10	2.50	.40	19.0	
Class A5, 00000>	3	4	137	136				18. 2	
Class B3. OOOo>	27	27	56	56	2. 20	2.60	.40	18.2	
Through freight:	-								
Through freight: Cylinders under 19 by 24 Mackinaw division. Cylinders 19 by 24 and over. 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers Local freight: Cylinders under 19 by 24					2.65 2.80				
Cylinders 19 by 24 and over					2.95				
80,000 to 100,000 pounds on drivers					2.80	2.85	. 05	1.8	
140,000 to 140,000 pounds on drivers					2.80 2.95	3.00 3.10	. 20	7. 1 5. 1	
Local freight:					2.00	0.10		0.2	
Cylinders under 19 by 24					3.05				
Cylinders 19 by 24 and over					3.35				
80,000 to 100,000 pounds on drivers					3.35 3.20	3.20	.00	0.0	
100,000 to 140,000 pounds on drivers					3. 20 3. 35	3. 20 3. 35	.00	0.0	
Class B4, 00000>	86	101	106	106	3.33				
Through freight					2.95	3.30	. 35	11.9	
Local freight: Cylinders under 19 by 24 Mackinaw division. Cylinders 19 by 24 and over 80,000 to 100,000 pounds on drivers. 100,000 to 140,000 pounds on drivers. 140,000 to 170,000 pounds on drivers. Class B4,0000> Through freight. Local freight. Class C2,00oo> Passenger. Through freight:	66	46	29	29	3.35	3.45	. 10	3.0	
Passenger					2.40	2.45	.05	2.1	
Through freight:					2, 65	2.75	. 10	3.8	
Under 19 by 24 inch cylinder Mackinaw division					2.80	2.10			
					3. 20	3. 20	.00	0.0	
Under 19 by 24 inch cylinder					3. 05	3. 20	.00	0.0	
Class C3, OOOoo>	126	125	54	54					
Passenger:					2, 40	2. 50	. 10	4.2	
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2.40	2.60	.20	8.3	
Through traight.	1					9.05	90	7 5	
Mackinaw division					2. 65 2. 80	2.85	. 20	7.5	
Cylinders under 19 by 24					2.95	3.00	. 05	1.7	
Local freight:					3, 05				
Mackinaw division					3. 20				
Cylinders over 19 by 24					3.35				
100,000 to 100,000 pounds on drivers					3.05 3.20	3.05	.00	0.0 0.0	
140,000 to 170,000 pounds on drivers					3.35	3.35	.00	0.0	
Class E4, 000000>		35		122		3.30			
Local freight						3.45			
Class F2, 00 000>	28	28	48	48			. 10		
Class F3, 000000>	60	78	76	77	2.40	2. 50	. 10	4.2	
Local freight:     Cylinders 19 by 24 and under     Mackinaw division.     Cylinders over 19 by 24.     80,000 to 100,000 pounds on drivers.     100,000 to 140,000 pounds on drivers.     140,000 to 170,000 pounds on drivers.     Class E4, 00000>     Through freight.     Local freight. Class F2, 00000>     Passenger. Class F3, 00000> Passenger.					2.40	2.70	.30	12.5	
CROSS-COMPOUND LOCOMOTIVES.									
Class B4, 00000> Local freight	99	99	85	85					
Local freight.					3.35	3.35	.00	0.0	
Through freight: 140,000 to 170,000 pounds on drivers					2.95	3. 10	. 15	5.1	
140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers		•••••			2.95	3.20	. 25	8.5	
T 10 001									

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	02102										
Class.		Number.		Average weight on drivers (tons).		e per of 100 or 10 or less emen.	Increase to fireme				
	1912	1914	1912	1914	1912	1914	A'mount.	Per cent.			
SINGLE-EXPANSION LOCOMOTIVES.											
Class B4, 00000>	21	33	83	83	\$3.30	\$3.30	\$0.00	0,0			
Switching. Class C2, OOoo>	5	5	42	42	2. 81	2. 81	.00	0.0			
Passenger					2. 76	2. 76	.00	0.0			
NEW YORK CENTRAL & HUDSON RIVER R. R.											
SINGLE-EXPANSION LOCOMOTIVES.											
Class A2, OO>	3		35								
Switching. Class A3, OOO>	3763	439	72	76	\$2.35						
Switching: First-class yards					2. 50	\$2,60	\$0.10	4.0			
Second-class yards Class A5, 00000>	5	A	134	135	2. 35	2. 50	. 15	6. 4			
Switching	322	300	58		2.50	2.60	.10	4.0			
Class B3, OOOo>Freight:	322	300	58	58							
100,000 to 140,000 pounds on drivers					2. 70 2. 70	3.00 3.10	.30	11.1 14.8			
Class B4, OOOOo>	561	390	94	92	3, 00	3.30	.30	10.0			
Switching. Class C1, Ooo>	4	4	12	12	2. 35	2. 50	.15	6. 4			
Passenger	178		39	39	2.40	2. 45	. 05	2. 1			
Class C2, OOoo>	178	165	39	39	2.40	2. 45	. 05	2.1			
Freight	184	186	75	75	2. 70	2.85	. 15	5. 6			
Passenger Freight					2. 40 3. 00	2.50 3.10	.10	4. 2 3. 3			
Class C4, OOOOoo> Freight:	43	16	84	61							
G2, G3, G4, G5, and G6 engines G and G1 engines					3.00	3.00	.00	0.0			
Class E3, 00000>	8		83		2. 70	3.00	. 30	11.1			
Freight Class E4, 000000>		263		107	2, 85						
Freight.	222	222	53	53		3.30					
Passenger Class F3, 000000>	332	443	83	85	2.40	2. 50	.10	4.2			
Passenger					2. 40 2. 70	2, 60 3, 20	. 20	8.3 18.5			
Class H2, 000 Oo>	8	11	30	31			. 50				
Passenger Class K3, 0000000>	18	18	68	68	2.40	2. 45	. 05	2.1			
Passenger				• • • • • •	2.40	2, 60	. 20	8.3			
FOUR-CYLINDER COMPOUND LOCOMOTIVES.											
Class E6, 000000000> Freight	26	30	150	150	2 20	4.00	.80	25. 0			
Class F2, 00000>	2		55		3. 20	4.00		20.0			
Passenger Class 000000>		1		181	2.40						
Switching						4.00					
TWO-CYLINDER COMPOUND OR CROSS- COMPOUND LOCOMOTIVES.											
Class A3, 000>	3		177								
Switching: First-class yards					2. 50						
Second-class yards Class B4, OOOOo>	43	43	83	88	2.35						
Freight					3.00	3.10	.10	3.3			
					-						

### NEW YORK, CHICAGO & ST. LOUIS R. R.

NEW YORK, CHICAGO & ST. LOUIS R. R.											
Class.	Number. Average weight on drivers (tons).			ht on vers	day miles hours	e per of 100 or 10 or less emen.					
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.			
SINGLE-EXPANSION LOCOMOTIVES.											
Class A3, 000>	1	55	52	54							
Less than 140,000 pounds on drivers 140,000 pounds or more on drivers Class B3, 0000>					\$2.39 2.39	\$2.50 2.60	\$0.11 .21	4.6 8.8			
Freight: 80,000 to 100,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 180,000 pounds on drivers Class B4, 00000>					2. 66 2. 66	2.85	.19	7. 1 12. 8			
140,000 to 180,000 pounds on drivers  Class B4. 00000>	54	60	72	73	2. 66	3. 10	.44	16. 5			
Less than 80,000 pounds on drivers					2, 66	9 85	10	7 1			
100,000 to 140,000 pounds on drivers 140,000 to 180,000 pounds on drivers Class C2, OOoo>	01	10			2. 66 2. 66	3.00	.34	12. 8 16. 5			
Passenger: Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers						0.45	10	4.2			
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 180,000 pounds on drivers Class C3, 00000>					2.35	2.50	. 15	6. 4 10. 6 14. 9			
								14.9			
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 180,000 pounds on drivers					2.35	2. 45 2. 50 2. 60	. 10 . 15 . 25	6. 4			
Freight:	1						. 35	10.6 14.9			
Less than 80,000 pounds on drivers	••••				2.66	2.75	.09	3. 4 7. 1			
100,000 to 140,000 pounds on drivers 140,000 to 180,000 pounds on drivers					2.66	3. 10	. 34				
NEW YORK, NEW	HAV	EN &	HAI	RTFO	RD R	R. R.					
				1	1	1 %	1	1			

SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>	20	16	35	35				
PassengerClass A3, OOO>	168	199	58	61	\$2.45	\$2.45	\$0.00	0.0
Switching:					2.40	2.50	. 10	4. 2
10-hour yards. 8-hour yards.					2.00	2.00	.00	0.0
Class B3, 0000>	357	349	60	60				
0 150 000 d d-i		,						
Through Local					2.80	3.00	. 20	7. <b>1</b> 12. 5
Local Less than 150,000 pounds on drivers— Through					2, 60	3.00	40	15. 4
L0031					2.60	3. 15	. 40	21. 2
Class B4, OOOOo> Through freight				69	2. 80	3.10	.30	10.7
Local					2. 80	3. 25		16. 1
Class C2, OOoo>	418	390	33	34				
Less than 80,000 pounds on drivers 80,000 to 100,000 pounds on drivers					2.45 2.45		.00	0.0
Class C3, 00000>	104	106	51	50	2.90	2.00	.00	2.0
Passenger: Less than 80,000 pounds on drivers	1				2.45	2.45	.00	0.0
80,000 to 100,000 pounds on drivers					2. 45	2.50	.05	2.0
Local freight,: Over 150,000 pounds on drivers Less than 150,000 pounds on drivers					2.80	3. 15	.35	12.5
Less than 150,000 pounds on drivers Through freight:					2.60	3. 15	. 55	21.2
Over 150,000 pounds on drivers Less than 150,000 pounds on drivers					2.80	3.00		7.1
Less than 150,000 pounds on drivers				1	. 2.60	3.00	. 40	15. i

#### NEW YORK, NEW HAVEN & HARTFORD R. R.-Continued.

						- 0 - 0 - 1					
· Class.	Nun	nber.	weig dri	rage ht on vers ns).	day miles hours	e per of 100 or 10 or less emen.	Increase t	o firemen.			
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.			
SINGLE-EXPANSION LOCOMOTIVES—contd.											
Class F2, oOOoo>	12	12	53	53	\$2.45	\$2.60	<b>\$</b> 0.15	6.1			
Class F3, 000000>	32	88	71	75							
Passenger Class G2, 0000>	7	3	34	36	2. 45	2. 70	. 25	10.2			
Passenger					2.45	2.45	.00	0.0			
FOUR-CYLINDER COMPOUND LOCOMOTIVES.											
Class C3, OOOoo> Passenger	2		60		2.45						
TWO-CYLINDER COMPOUND OR CROSS- COMPOUND LOCOMOTIVES.											
Class A3, OOO>	17	6	68	68							
10-hour yards 8-hour yards					2.40 2.00	2.50	.10	4. 2 0. 0			
NEW JERSEY & NEW YORK R. R.											
SINGLE-EXPANSION LOCOMOTIVES.											
Class B4, OOOOo> Freight	2	2	76	66	\$2.60	\$3 OO	\$0.40	15. 4			
Class C3, OOOoo>	12	10	58	59	2.40	2.60	. 20	8.3			
Class F2, 00000>	3	2	39	39				8, 3			
Passenger					2.40	2.60	. 20	8, 3			
NEW YORK, SUSQ	UEHA	ANNA	& W	ESTE	RN R	R.					
SINGLE-EXPANSION LOCOMOTIVES.											
Class A3, 000>		3		71							
Switching. Class B3, OOOo> Freight	19	20	49	55		\$2.50					
Freight Switching					\$2.50 2.20	3.00 2.50	\$0.50 .30	20.0			
Class B4, OOOOo> Freight	30	38	65	65	2. 50	3.00	. 50	20.0			
Switching					2. 20	2.50	. 30	13.6			
Class C2, OOco> Passenger	13	14	40	39	2.35	2. 50	.15	6.4			
Class C3, OOOoo>	4	10	56	57	2.35	2.50	.15	6, 4			
PENN	SVLV	ANIA	RR								
	0111	1121111	10. 10	•							
SINGLE-EXPANSION LOCOMOTIVES.											
Class A2, OO> Switching	107	113	47	51	\$2.60	\$2.60	\$0.00	0.0			
Class A3, OOO>	339	365	65	70							
144,100 pounds on drivers					2. 81 2. 60	2. 81 2. 60	.00	0.0			
Under 144,100 pounds on drivers Class B3, OOOo> Freight:	210	204	68	68	2.00	2.00	.00				
163,000 pounds or over on drivers					3.00 2.85	3.10 3.00	.10	3.3 5.3			
· ·											

PENNSYLVANIA R. R.-Continued.

Class.	Number. weight on drivers ho		miles hours	e per of 100 s or 10 s or less emen.	Increase t	o firemen.												
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.										
SINGLE-EXPANSION LOCOMOTIVES—contd. Class B4, 00000>			82	88			• • • • • • • • • • • • • • • • • • • •											
100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers 170,000 to 200,000 pounds on drivers					\$2. 85 3. 00	\$3.00	\$0.15	5. 3										
200,000 to 200,000 pounds on drivers 200,000 to 250,000 pounds on drivers Class C2, OOoo>		307	45	46	3.00 3.00	3. 20 3. 30	. 20	10.0										
Passenger: Less than 80,000 pounds on drivers					2. 40	2. 45	. 05	2. 1										
80,000 to 100,000 pounds on drivers Class C3,000o>	10	10	70	70	2.40	2. 50	.10	4. 2										
Class C3, 00000> Passenger Class E3, 00000> Passenger	i	1	83	84	2, 50	2.70	.20	8.0										
Passenger Class E4, 00000> Freight Class F2, 00000>		1		118	2.00	3.30												
Passenger		285	59	60	2. 50	2.60	.10	4, 0										
Class E3 0000000	112	137	90	91	2.60	2. 85	. 25	9.6										
Passenger Mallet, 00000-00000>		1	219	219	3.00	4.00	1.00	33.3										
FOUR-CYLINDER COMPOUND LOCOMOTIVES.																		
Class F2, 00 000> Passenger		2	54	59	2.50	2.60	0.10	4.0										
Passenger. Class CC.s, OOOOoooo> Freight.		1		193		4.00												
PEN	NGVI.	T/ A NT	A CO	1	1	1												
SINGLE-EXPANSION LOCOMOTIVES.		7 22-13.		1	1	1		PENNSYLVANIA CO.										
Class A2, 00>	6																	
		4	35	38	20.60	en en	20.00											
First-class vards	199				\$2.60 2.50	\$2.60 2.50	\$0.00	0. 0 0. 0										
First-class yards Second-class yards Class A3, 000> Switching: First-class yards		195	35	38	2.50	2.50	.00	0.0										
First-class yards . Second-class yards . Class A3, 000> . Switching: First-class yards . Second-class yards . Class A4, 0000> .	10				2. 50 2. 60 2. 50	2. 50 2. 60 2. 50	.00	0.0										
First-class yards . Second-class yards . Class A3, 000> . Switching: First-class yards . Second-class yards . Class A4, 0000> .	10	195	61	65	2.50	2.50	.00	0.0										
First-class yards Second-class yards Class A3, 000> Switching: First-class yards Second-class yards Class A4, 0000> Switching: First-class yards Second-class yards Second-class yards Second-class yards Least B4, 00000> Local freight: Less than 100,000 pounds on drivers	780	195	61	65	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00	.00	0.0 0.0 0.0 0.0 0.0										
First-class yards . Second-class yards . Settching: First-class yards . Second-class yards . Second-class yards . Second-class yards . Settching: First-class yards . Second-class yards . Local freight: Less than 100,000 pounds on drivers . 100,000 to 140,000 pounds on drivers .	780	195	61	65	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00 3. 00 3. 00	2.50 2.60 2.50 2.60 2.50 3.00 3.00 3.10	.00 .00 .00 .00 .00	0.0 0.0 0.0 0.0										
First-class yards Second-class yards Class A3, 000> Switching: First-class yards Second-class yards Class A4, 0000> Switching: First-class yards Second-class yards Second-class yards Local freight: Less than 100,000 pounds on drivers 140,000 to 140,000 pounds on drivers 170,000 to 200,000 pounds on drivers 200,000 to 250,000 pounds on drivers 200,000 to 250,000 pounds on drivers	780	195	61 53 82	65 53 87	2.50 2.60 2.50 2.60 2.50 3.00 3.00	2.50 2.60 2.50 2.60 2.50 3.00 3.00	.00	0.0 0.0 0.0 0.0 0.0										
First-class yards Second-class yards Class A3, 000> Switching: First-class yards Second-class yards Class A4, 0000> Switching: First-class yards Second-class yards Second-class yards Local freight: Less than 100,000 pounds on drivers 140,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers 200,000 to 250,000 pounds on drivers 200,000 to 250,000 pounds on drivers	780	195	61	65 53 87	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00 3. 00 3. 00 3. 00	2.50 2.60 2.50 2.50 3.00 3.00 3.10 3.20	.00 .00 .00 .00 .00 .00 .00 .10	0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.3 6.7										
First-class yards Second-class yards  Class A3, 000>  Switching:     First-class yards  Second-class yards  Class A4, 0000>  Switching:     First-class yards  Second-class yards  Second-class yards  Class B4, 0000>  Local freight:     Less than 100,000 pounds on drivers  140,000 to 170,000 pounds on drivers  170,000 to 200,000 pounds on drivers  200,000 to 250,000 pounds on drivers  Class C2, 000o>  Passenger  Class C3, 000o>  Through freights:	780 67 89	195 8 937 58 86	61 53 82	65 53 87	2. 50 2. 60 2. 50 2. 50 3. 00 3. 00 3. 00 3. 00 2. 40	2.50 2.60 2.50 2.50 3.00 3.10 3.20 3.30 2.45	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.3 6.7 10.0										
First-class yards Second-class yards Second-class yards Switching: First-class yards Second-class yards Second-class yards Second-class yards Setond-class yards Second-class yards Second-class yards Losa fat, 00000> Local freight: Less than 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 170,000 to 200,000 pounds on drivers 170,000 to 200,000 pounds on drivers Class C2, 0000> Passenger Class C3, 00000> Through freights: Less than 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers 140,000 to 170,000 pounds on drivers Less than 140,000 pounds on drivers	10 780 67 89	195 8 937 58 86	61 53 82	65 53 87	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00 3. 00	2.60 2.50 2.60 2.50 3.00 3.10 3.20 3.30 2.45	.00 .00 .00 .00 .00 .00 .00 .10 .20 .30 .05	0.0 0.0 0.0 0.0 0.0 0.0 3.3 6.7 10.0 0.0 0.0										
First-class yards Second-class yards  Class A3, 000>  Switching:     First-class yards  Class A4, 0000>  Switching:     First-class yards  Class A4, 0000>  Switching:     First-class yards  Second-class yards  Class B4, 00000>  Local freight:     Less than 100,000 pounds on drivers.     100,000 to 140,000 pounds on drivers.     140,000 to 170,000 pounds on drivers.     170,000 to 250,000 pounds on drivers.     200,000 to 250,000 pounds on drivers.  Class C2, 0000>  Passenger  Class C3, 00000>  Through freights:     Less than 140,000 pounds on drivers.  Class E3, 00000>  Passenger  Class E2, 0000>  Passenger  Class E2, 0000>  Passenger	780 780 67 89	195 8 937 58 86	61 53 82 32 63 84 58	65 53 87 32 64, 84 58	2. 50 2. 60 2. 50 2. 50 3. 00 3. 00 3. 00 3. 00 2. 40	2.50 2.60 2.50 2.50 3.00 3.10 3.20 3.30 2.45	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.3 6.7 10.0										
First-class yards Second-class yards. Class A3, 000> Switching: First-class yards. Second-class yards. Class A4, 0000> Switching: First-class yards. Second-class yards. Second-class yards. Second-class yards. Second-class yards. Class B4, 00000> Local freight: Less than 100,000 pounds on drivers. 100,000 to 140,000 pounds on drivers. 170,000 to 200,000 pounds on drivers. 170,000 to 200,000 pounds on drivers. 200,000 to 250,000 pounds on drivers. Class C2, 0000> Passenger. Class C3, 0000> Through freights: Less than 140,000 pounds on drivers. 140,000 to 170,000 pounds on drivers. Class E3, 0000> Passenger.	780 780 67 89	195 8 937 58 86	61 53 82 32 63	65 53 87 32 64,	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00 3. 00 3. 00 3. 00 3. 00 3. 00 2. 40	2. 50 2. 60 2. 50 2. 60 2. 50 3. 00 3. 10 3. 20 3. 30 2. 45 3. 00 3. 00 2. 70	.00 .00 .00 .00 .00 .00 .00 .10 .20 .30 .05	0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.3 6.7 10.0 2.1										
First-class yards Second-class yards Switching: First-class yards Second-class yards Second-class yards Second-class yards Second-class yards Second-class yards First-class yards Second-class yards Losa freight: Less than 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers 200,000 to 250,000 pounds on drivers 200,000 to 250,000 pounds on drivers Class C2, OOoo> Passenger Class C3, OOOoo> Through freights: Less than 140,000 pounds on drivers 140,000 to 170,000 pounds on drivers	780 780 67 89	195 8 937 58 86	61 53 82 32 63 84 58	65 53 87 32 64, 84 58	2. 50 2. 60 2. 50 2. 50 3. 00 3. 00 3. 00 3. 00 3. 00 3. 00 3. 00 3. 00 2. 40 2. 50	2.50 2.60 2.50 2.50 3.00 3.00 3.10 3.20 3.30 2.45 3.00 3.00 2.70	.00 .00 .00 .00 .00 .00 .00 .10 .20 .30 .05	0.0 0.0 0.0 0.0 0.0 0.0 3.3 6.7 10.0 2.1										

PHILADEI	PHIA	& R	EADI	NG R	Y.			
Class.	Number.		Ave weigh driv (ton	vers	Rate day of miles hours to fire	or 100 or 10 or less;	Increase to fireme	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.			·				•	
Class A2, OO> Switching: First-class yards	77	75	46	49	\$2.85	\$2,85	\$0.00	0.0
Second-class yards Class A3, OOO>	61	63	63	71	2.65	2.65	. 00	0.0
Switching: First-class yards Second-class yards					2.85 2.65	2.85 2.65	.00	0.0 0.0
Class A4, 0000> Switching: First-class yards	20	15	67	76	2,85	2.85	.00	0.0
Second-class yards. Class B3, OOOo> Switching:	4	2	45	45	2.65	2.65	.00	0.0
First-class yards Second-class yards					2.85 2.65	$2.85 \\ 2.65$	.00	0.0 0.0
Freight: 144,150 pounds and over on drivers. Less than 144,150 pounds on drivers.					3. 25 2. 70	. ,		
Class B4, 0000o> Switching: First-class yards		507	71	77	2.85	2.85	.00	0.0
Second-class yards Freight:					2, 65 3, 25	2.65	.00	0.0
144,150 pounds and over on drivers Less than 144,150 pounds on drivers 140,000 to 170,000 pounds on drivers— Through					2.70	3.10		
Class C2, OOoo>		142	41	4.5		3. 25		
Passenger: Local train, first year Express train—					3.75			
Second year Second year Succeeding years Standard rate Class C3, 0000>					4.10	2.50		
			53	58	3. 75			
Local train, first year.  Express train, first year.  Standard rate  Switching:	1	1	1		4.10	2. 70		
First-class yards	1	1			2.85 2.65	2.85 2.65	.00	0.0 0.0
144,150 pounds and over on drivers. Less than 144,150 pounds on drivers. 140,000 to 170,000 pounds on drivers— Through					3. 25 2. 70			
Through		7		125		3. 10 3. 25		
Local.  Class E4, 000000>  Freight.  Class F2, 00000>  Passenger:	50	51	50	54		3, 30		
Local train, first year		ļ			3.75			
Second year. Succeeding years. 80,000 to 100,000 pounds on drivers					4.10 4.20	2.50		
100,000 to 140,000 pounds on drivers. Class H3, 000000> Passenger:	. 10		60	62		2.60		
First year. Second and subsequent years. 100,000 to 140,000 pounds on drivers.					2.45 2.60	2.60		

RUTLAND R. R.

Class.	Number.		Number.		Average weight on drivers (tons).		Rate per day of 100 miles or 10 hours or less to firemen.		Increase to firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.		
SINGLE-EXPANSION LOCOMOTIVES.										
Class A2, 00>	1	1	32	32						
Rutland					\$2.10		\$0.40	19.0		
All other yards				60	2.00	2.50	. 50	25. 0		
Class A3, OOÔ>	5	6	58	60	2 10	2.50	. 40	19.0		
All other yards						2.50	.50	25. 0		
Class B3, 000o>	18	16	49	50	2.00			20.0		
Switching—										
Rutland					2.10		. 40	19.0		
All other yards 20 or 21 inch cylinders					2.00	2.50	. 50	25. 0 0. 0		
Freight—					2.80	2.80	.00	0.0		
Under 20-inch cylinders	1				2, 70	2.85	. 15	5, 6		
Over 21-inch cylinders					2.90	3.00	. 10	3. 4		
Class B4, 00000>	15	21	88	90						
Freight—				İ	0.00	0 00	20			
Över 21-inch cylinders					2.80	3.00	. 20	7.1		
Class C2, OOoo>	18	17	32	33	2.00	3. 20	.40	14. 0		
Passenger—	10	1,	02	00						
Less than 80,000 pounds on drivers					2.35	2.45	. 10	4.3		
80,000 to 100,000 pounds on drivers					2.35	2.50	. 15	6.4		
Class C3, 00000>	29	35	59	63						
Freight—					2, 70	2, 85	. 15	5, 6		
80,000 to 100,000 pounds on drivers 100,000 to 140,000 pounds on drivers					2. 80	3, 00	.20	7.1		
Passenger—					2.00	0.00	.20	1.1		
100,000 to 140,000 pour ds on drivers					2.40	2.60	. 20	8.3		
140,000 to 170,000 pounds on drivers					2.45	2.70	. 25	10. 2		

#### TOLEDO & OHIO CENTRAL RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>		28	57	57	<b>2</b> 9 40	eo 50	\$0.10	4.2
Switching. Class A4, 0000>		3		120	-52.40	\$2.00	e0. 10	4. 4
Switching						2.60		
Class B4, 00000>	62	60	77	78				
Freight— 21-inch cylinders or over					2.95			
20-inch cylinders								
Engines weighing 140,700, 141,660, and								
149,000 pounds on drivers						3. 10		
Etgines 233,500 pounds on drivers Class C2, OOoo>	18	15	38	41		3.30		
Passenger—	1	10	00	- 11				
17-inch cylinders					2.25			
18-inch cylinders.					2.35	2.45		
Engines 59,400 pounds on drivers Engines 82,000, 87,000, and 92,500						2.45		
pounds on drivers						2.50		
·Class C3, OOOoo>	23	23	46	46				
Locals 71, 72, 88, and 89 All other locals.					2.94 2.85	3.09	. 15	
Through freight					2.80	3.00	. 10	0. 3
Work, wreck, and circus train					2.70	2.85	. 15	5.6
Mine runs.					2.55			
Class F3, 0000oo> Passenger						2.60		
absoliger						2.00		

TOLEDO, PEORIA & WESTERN RY.

Class.		ıber.	weigl driv	rage ht on vers ns).	miles hours	e per of 100 or 10 or less emen.		\$0.70 35.0 .55 21.6 .35 16.4 .45 22.5 .45 17.6	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.	
SINGLE-EXPANSION LOCOMOTIVES.									
Class B4, OOOOo> Passenger	14	<b>1</b> 6	69	71	\$2.00	\$2.70	80.70	25.0	
Freight-									
20 by 24 inch cylinders					2. 55 2. 75	3. 10			
Class C2, OOoo>	7	7	. 25	25	2. 10	3. 10	. 55	10.4	
Passenger					2.00	2.45			
Freight. Class C3, OOO000>					2.55	3.00	. 45	17.6	
Class C3, OOO00>	10	10	54	54	2.00	2, 60	.60	30, 0	
Passenger Freight					2. 55	3.00	. 45	17.6	
								1	

#### TOLEDO, ST. LOUIS & WESTERN R. R.

					<u> </u>			
SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	10	10	61	61				
Switching					\$2.20	\$2.50	\$0.30	13. 6
Class B3, 0000>	9	9	50	50				
Freight—								
Through					2.60	2. 75	. 15	5.8
Local					2. 75	3.15	.40	14.5
Class B4, 00000>	34	39	81	81				1
Freight. Class C2, OOoo>		8	31	31	2.875	3. 10	. 225	7.8
Degrap and	8	8	31	31		2, 45	. 225	10. 1
Passenger	21	31	51	51	2. 220	2. 40	. 223	10. 1
Class C3, OOOoo> Passenger	91	91			2 225	2. 50	. 275	12.4
Fraight						3.00	. 125	4. 4
Freight. Class F2, 00 000>	2	2	44	44	2.010	0.00	. 120	2. 2
Passenger				**	2, 225	2, 50	. 275	12.4
							.210	20. 2

#### VANDALIA R. R.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, 00>		1	40	40	00.50	20. 70		
Switching.		32	70	70	\$2.50	\$2.50	\$0.00	0.0
Class A3, OOO> Switching		32	10	10	2, 50	2, 50	.00	.0
Class B3, 0000>	83	83	71	71	2.00	2.00		
Freight					2.85	3.10	. 25	8.8
Switching					2.50	2.60	. 10	4.0
Class B4, 00000>		56	71	71	2 00	2 70		3. 3
Freight. Class C2, OOoo>	29	25	34	35	3.00	3. 10	.10	3. 3
Passenger		20	0.2	00	2, 40	2, 45	. 05	2. 1
Class C3, OOO00>		24	46	46				
Passenger					2.40	2.60	. 20	8.3
Freight					2. 85	2.85	.00	.0
Class F2, 00 000> 80,000 to 100,000 pounds on drivers		19	52	52	2, 50	2, 50	.00	.0
100,000 to 140,000 pounds on drivers					2. 50	2. 60	.10	4.0
Class F3, 000000>		12	93	83	2.00	2.00	. 10	
Passenger					2.60	2. 70	.10	3.8

WEST SIDE BELT R. R.

Class.	Nun	aber.	weig dri	erage ht on vers ns).	day miles hours	e per of 100 s or 10 or less emen.	Increase t	o firemen.
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.  Class A2, OO> Switching. Class B4, OOOO> Switching. Freight. Class C2, OOoo> Passenger. Class C3, OOOoo> Switching.	1 2	1 2 1	37 80 33 40	37 80 33 40	\$2.40 2.40 2.90 2.32 2.40	\$2.50 2.60 3.10 2.45 2.50	\$0.10 .20 .20 .13	4. 2 8. 3 6. 9 5. 6
FOUR-CYLINDER COMPOUND LOCOMOTIVES.  Class OOO—OOO Mallet	2	2	162	162	3.00	4.00	1.00	33. 3

#### WABASH-PITTSBURGH TERMINAL RY.

SINGLE-EXPANSION LOCOMOTIVES.								
Class A3, 000>	1		42					
Switching					\$2.40			
Class B4, 00000>	12	12	100	100				
Switching					2.40	\$2.60	\$0.20	8.3
Freight					2.90	3.30	. 40	13.8
Class C2, 0000>	2	2	33	33				
Passenger					2.32	2.45	. 13	5.6
Class C3, OOOoo>	2	2	36	36				
Switching.					2.40	2.50	. 10	4.2
Freight					2.70	2.75	. 05	1.9

#### WHEELING & LAKE ERIE R. R.

		,				,		
SINGLE-EXPANSION LOCOMOTIVES.								
Class A2, OO>	5	5	43	43	\$2.30	\$2.50	\$0.20	8.7
Class A3, OOO>	29	29	52	52				
140,000 pounds on drivers					2.40	2.50	. 10	4.2
Over 140,000 pounds on drivers	7	5	43	41	2.40	2.60	. 20	8.3
Freight, between 80,000 and 100,000 pounds			40	31	2. 70	2.85	. 15	5, 6
Class B4, OOOOo> Freight:	79	99	87	93				
Less than 150,000 pounds on drivers 150,000 pounds or over on drivers					2.70 2.90	3. 20 3. 30	.50	18.5 13.8
Class C2, O Ooo > Passenger:	16	16	34	35				
Less than 80,000 pounds on drivers 80,000 pounds to 100,000 pounds on drivers					2.32	2.45	.13	5. 6 7. 8
Class C3, OOOoo>	50	48	40	39		2.00		1.0
Less than 80,000 pounds on drivers					2.70	2.75	. 05	1.9
80,000 pounds to 100,000 pounds on drivers.					2.70	2.85	. 15	5.6
Class F2, 00 Ooo> Passenger, 100,000 to 140,000 pounds on	6	6	50	50				
drivers			,		2.32	2.60	. 28	12.1

ZANESVILLE & WESTERN RY.

. Class.		Number.		Average weight on drivers (tons).		e per of 100 or 10 or less emen.	Increase to firemen.	
	1912	1914	1912	1914	1912	1914	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.			49	40				
Class B3, OOOo>	4	4	43	43	\$2.70	e2 00	\$0.30	11.1
Local freight Through freight					2.70	2,85	. 15	5.6
Work, wreck, circus, and mine runs					2.55	2.85	.30	11.8
Class B4, OOOOo>	7	9	61	63				
Through freight					2.76	3.10	.34	12.3
Local freight					2.76	3.25	.49	17.8
Class C2, OO00>	3	6	29	29	2, 23	2.45	. 22	9,9
Passenger Class C3, OOOoo>	4	1	39	39	2.23	2.40	. 22	3. 3
Local freight				00	2,70	3.00	.30	11.1
Through freight					2.70	2.85	. 15	5.6
Work, wreck, circus, and mine runs						2.85	.30	11.8
				1			i .	

#### XVI.

# RAILROADS IN EASTERN TERRITORY AND ORDER OF RAILWAY CONDUCTORS, BROTHERHOOD OF RAILROAD TRAINMEN: 1913.

(Submitted to arbitration by an agreement dated July 26, 1913. Award rendered November 10, 1913.)

Adjustment of requests for higher rates of pay and improvements in working conditions, as has been pointed out, had been made by arbitration for locomotive engineers in eastern territory in November, 1912, and for locomotive firemen in April, 1913. This cycle of wage adjustments, so far as employees engaged in train movements was concerned, was completed by the arbitration in the latter half of 1913 of certain requests of conductors and trainmen in the territory east of the Mississippi and north of the Ohio and Potomac rivers. About 20,000 conductors and 80,000 trainmen and 42 of the leading eastern

railroads were involved in these proceedings.

This arbitration was the first held under the auspices of the so-called Newlands law which superseded the Erdman Act, and created the United States Board of Mediation and Conciliation. The arbitration board selected to hear the case consisted of six members, divided into three groups of two each, representative of the railroads, the employees, and the public. The latter group was composed of the Seth Low, president of the National Civic Federation and formerly president of Columbia University, and Dr. John H. Finley, president of the University of the State of New York. The railroads were represented by W. W. Atterbury, vice president of the Pennsylvania Railroad, and A. H. Smith, vice president of the New York Central lines. L. E. Sheppard, vice president of the Brotherhood of Railroad Trainmen, represented the employees. The hearings of the arbitration board were held in New York City during the period September 11 to October 10, 1913. The award of the board was handed down on November 10, 1913.

#### SUMMARY OF THE BOARD'S DECISION.

The award of the arbitration board, so far as the main issues and principles involved in the proceedings are concerned, may be briefly summarized as follows:

1. Data or time were not available for a complete study of the question of the standardization of rates of pay and working conditions. No attempt was therefore made to standardize rates and conditions between the East and West, but the effort was made to standardize rates between the East and South, because of similarity in working conditions and because of the fact that rates of pay for other skilled

workers were practically uniform in these sections. The recommendation was made that Congress should authorize some public body to make an independent inquiry as to whether there was any scientific ground for maintaining a wage differential between the East and the West.

2. As a result of its own inquiries the board came to the conclusion that the cost of living to workers in the East with an income ranging between \$800 and \$1,200 had advanced 7 per cent during the period 1910–1912. They considered this the basic factor in making their award. They therefore granted a corresponding money increase to conductors and trainmen amounting according to their estimate to approximately \$6,000,000. This amount, as a general rule, they endeavored to distribute in advances in rates of pay, other factors, however, being taken into consideration, such as increased work or responsibilities, or the difference between eastern and southern territory in the case of certain classes of service.

3. Upon the basis of exhibits submitted by the employees, the board reached the conclusion that the element of hazard or risk for trainmen had tended to decrease instead of increase. No added compensation, therefore, in its opinion, could be given to offset this factor. They considered risks to have been reduced by the substitution of steel for wooden cars and by the installation of safety devices by the

railroads.

4. As a general proposition the board declared that conductors and trainmen, however, should receive a higher rate of compensation as compared with other skilled labor because of the greater element of hazard in their occupations.

5. The board held further that there had been no additional responsibility imposed upon brakemen because of heavier and longer trains, but, on the other hand, the responsibilities of conductors had been

increased

6. The increased productivity of the transportation industry, the board thought, had been due to added capital investments and to mechanical appliances and inventions and not to the working forces. They noted one exception, mine runs, to this general finding and gave substantial recognition in the form of higher rates to engineers and firemen in this class of service.

7. The board held that there was no working relation between

freight and passenger rates and rates of pay to employees.

8. The percentage of increase in rates of pay granted in the passenger service was not large. Larger advances were allowed in freight

service because of the longer hours of work.

An action of the board, which was of general interest and which should be specially mentioned, consisted in the recommendation that Congress should authorize some public authority to make an independent inquiry for the following purposes:

1. To ascertain whether there was any reason for maintaining a

wage differential between the East and West.

2. To study existing wage scales, and to recommend "a scientific basis for the payment of railway employees who operate trains."

The former Commission on Industrial Relations had just been established, and the arbitration board suggested that it undertake this investigation.

### REVIEW OF ARGUMENT.

Conductors and trainmen asked for western rates of pay on the following general grounds:

Standardization.
 Cost of living.

3. Because of increased risk, labor, and responsibility.

4. Because of the increased productivity of the work of the train crews.

5. Because profits of railroads had increased out of proportion to

wages.

The men submitted testimony to show that railroading is worth just as much in one section of the country as another, with the exception of the so-called mountainous district of the West. The essential conditions affecting the lives of the men in all three territories they claimed were the same. It was pointed out further that the operating rules for railways have been largely standardized by the American Railway Association, which embraces all railroads in the United States, and that the Car Builders' Association was standardizing in the construction of cars. Figures from the Bureau of Labor Statistics were also submitted to show that wages in other trades were practically identical in all sections of the country. Evidence was also presented to prove that railroads traversing the same territory and operating under identical conditions, in one case, carried eastern rates of pay to conductors and trainmen and, in the other, western rates.

The railroads made reply to the argument of the employees by the statement that there is no such thing as standardization of rates and rules because the relation between working rules and rates of pay can not be disassociated; that rules and rates differ in the same territory and between different territories. They acknowledged that rates were higher in the West and South than in the eastern territory, but conditions of employment and working conditions, they asserted, were easier in the East because of better equipment and roadway and working rules. Lighter and less dangerous work, the railroads also claimed, offset the comparatively lower earnings of the men in the

East.

The railroads argued further that receipts per ton and passenger mile were higher in the South and West than in the East, and, despite this fact, conductors and trainmen received a greater proportion of the receipts per train mile in the East than in the other two sections. This was due, they declared, to the short runs in the East (less than 155 and 100 miles per day), which were paid for as a full day.

Finally, the railroads declared that the justice of the higher wage scales in the South and West had not been established, and without a justification of these scales rates in the East should not be raised to their level. Southern and western schedules, they stated, were

not entitled to consideration as standard scales.

The finding of the board was that standardization of rates of pay between eastern and western territory was then impossible, and that it was uncertain whether conductors and trainmen in the West wished this to be done. They also found that rates of pay in other organized trades were higher in the West than in the East. They came to the final conclusion that rules and rates were already partially standardized between the East and South, and endeavored further to standardize them so that all rates would be uniform in the territory east of the Mississippi River. The board pointed out that rates in other occupations than railroading were largely the same in these two sections.

In attempting to standardize rates as far as practicable between the East and South the following detailed awards were made:

1. Rates asked for by conductors in passenger service in eastern territory, which were the same as those obtaining in the South, were allowed.

2. In local freight service small advances were made, but they were the same rates as then paid in the South for conductors and brakemen. In through freight service the rates awarded also approximated those in the South. Increases granted were largest in freight service, because the board stated men have to work abnormal hours in the East, longer than in the other two territories. In yard service first-class yards in the East were placed upon the Chicago basis. In its opinion, the board also declares that rates should ultimately be standardized between all sections, but found itself without sufficient data or time to work this out, and recommended a congressional inquiry as to this question. The board stated further that there was no working relation, in its opinion, between freight and passenger rates and rates of pay in different sections.

As to cost of living, the men submitted data showing the increased cost of food during the 10 years preceding the arbitration. The railroads, on the other hand, contended that the arbitration board should accept as a basing or starting point for its decision the wage adjustments with trainmen and conductors in 1910; that there had been no increase in cost of living since that date, and hence no increase in wages on that ground. The railroads, however, did not

submit any testimony to establish this claim.

The board in its award assumed that increases in cost of living had been adequately cared for prior to 1910 by the adjustments of 1910 between the conductors and trainmen and the rairoads. On its own examination, however, of Bulletin 132 of the United States Bureau of Labor Statistics, the board came to the conclusion that there had been a substantial increase in the cost of living during the period of 1910–1912 for men having incomes from \$800 to \$1,200 per annum, amounting to at least 7 per cent. They considered this factor as basic, and aimed to award a corresponding wage increase to the employees, amounting in the aggregate, according to their estimate, to approximately \$6,000,000.

As to the general claim of increased risk, labor, and responsibility, the men argued that their labors and responsibilities had been increased by the lengthening of trains and use of larger equipment, and furthermore, that larger risks had to be taken and greater

hazards incurred.

The railroads answered by the argument that although length of trains had been increased, additional labor, risks, and responsibilities had been offset by the installation of labor saving and safety devices.

In this connection, the findings of the board were:

1. Risks and accidents to trainmen and conductors had declined instead of increased.

2. There had been no increased labor to trainmen since 1910 for handling larger trains because of the wider use of the air brake.

3. Responsibilities of conductors had become greater because of heavier trains. Substantial recognition to this finding was given in some instances by larger increases in rates to conductors than to brakemen, baggagemen, and flagmen.

As to increased productivity of train crews, the men claimed that their output had been greatly increased by lengthening of trains, or

the increase in the number of cars handled by a train crew.

Against this argument the railroads contended that any increased productivity of employees had been met by the wage adjustment of 1910, and submitted evidence for the purpose of proving that the

employees received more per traffic unit than formerly.

The finding of the board was that increased productivity was due to new capital investments and not to labor, except in the case of mine runs. An increase in rates was granted to cover the increased productive efficiency of conductors and trainmen in this branch of the service.

In connection with profits and wages, the men claimed that profits of the railroads were increasing, while the railroads ignored this

argument except to show that fixed charges had advanced.

The board stated in its award that there was no relation between wages and profits, and that the argument of the men was without any significance in view of the fact that the railroads did not claim inability

to pay increased wages.

As to the comparison of the pay of conductors and trainmen and other skilled labor, the railroads claimed that the pay of conductors and trainmen was greater than other skilled labor, while the men replied that they deserved higher rates of pay because of greater responsibilities and hazards. In its findings, the board sustained the contention of the men.

The railroads put forward the claim that wages of brakemen should be reduced because of full crew bills and similar legislation. The employees declared that such legislation had been passed in 20 States, only 5 of which were in the East, and no discrimination had been made in rates of pay in the other States. The board held that it was not within its purview to pass upon legislation of the States.

As to overtime payments of time and one-half, the board stated that hours of work were unreasonably long and should be reduced. It refused, however, to accept punitive measures to remedy this situation, because they believed a considerable amount of overtime was beyond the control of railroad managements. The hope was expressed that some other remedy for longer hours could be devised.

The board earnestly called the attention of the country to the fact that any failure to modernize the railroads with safety devices and steel equipment resulted in greater hazard or death and injury to passengers and employees, and decreased efficiency of operation. It considered any policy which fails to give sufficient rates to the railroads for this purpose a "misfortune."

### THE AWARD IN DETAIL.

The detailed requests of the employees as compared with the findings of the board of arbitration are shown below. The requests of the employees were put forward in the form of articles designated by letters from A to Q, inclusive. In the comparison of the award of the arbitration board with these requests, the articles of the requests and the awards are shown in parallel columns.

REQUESTS OF EMPLOYEES AND AWARD OF BOARD COMPARED.

### ARTICLE A.

# REQUESTS OF CONDUCTORS AND AWARD OF THE BOARD OF ARBITRATION.

Passenger service, steam and electric:	Passenger service, steam and electric:
Per mile, cents.	Per mile, cents.
Conductors	Conductors 2. 90 Assistant conductors or ticket col-
Baggagemen       1. 87         Flagmen or rear brakemen       1. 80         Brakemen       1. 74	lectors. 2.30 Baggagemen 1.65
	Flagmen, rear brakemen, and brakemen 1.60
Minimum day of 155 miles.	Minimum day of 155 miles.

### ARTICLE B.

Passenger service, runs of less than 155 miles—rates:	Passenger service, runs of less than 155 miles—rates:
	Conductors       \$4.50         Assistant conductors or ticket collectors       3.57         Baggagemen       2.75         Flagmen and rear brakemen       2.60         Brakemen       2.55

Assistant conductors and ticket collectors not to be created. Rates awarded only applicable where these designations are already made in schedules.

Rates of pay to flagmen and rear brakemen to apply to all employees performing these services regardless of whether they are known by these titles.

### ARTICLE C.

Overtime on short turn-around runs, no single trip of which exceeds 80 miles, to be paid for all time actually on duty beyond 8 hours and within 10 consecutive hours, and also for all time in excess of 10 consecutive hours, computed from time required to report for duty, at the following rates per hour:

Overtime allowed after 8 hours within 12 consecutive hours, and after 12 hours time to be counted as continuous where release from actual duty does not exceed 1 hour, at the following rates:

time required to report for duty, a	т те		
following rates per hour:			
•	Cents.		Cents.
Conductors		Conductors	
Assistant conductors and ticket col-		Assistant conductors and ticket col-	
lectors		lectors	35. 7
Baggagemen	29.0	Baggagemen	27.5
Flagmen or rear brakemen		Flagmen or rear brakemen	26.0
Brakemen	27.0	Brakemen	25. 5

All other passenger trainmen shall be paid overtime on the speed basis of 25 miles per hour.

Regularly assigned passenger trainmen available for duty the entire month shall receive the following rates per month:

Conductors	\$135.00
Baggagemen	
Flagmen or rear brakemen	
Brakemen	81.00

When regular men lay off, extra men shall receive the same rates as the regular men, the sum total equaling the above monthly guaranty.

All other passenger trainmen shall be paid on a speed basis of 25 miles per hour.

Regularly assigned passenger trainmen available for duty the entire month shall receive the following rates per month:

Conductors	\$135.00
Baggagemen	82.50
Flagmen or rear brakemen	
Brakemen	76. 50

When regular men lay off, extra men shall receive the same rates as the regular men, the sum total equaling the above monthly guaranty.

### ARTICLE D.

Reductions in crews or increases in mileage from assignments in passenger service in effect November 1, 1912, shall not be made for the purpose of offsetting benefits of award.

This request allowed with reservation that railroads might change suburban and short run assignments and mileage, so as to avoid excessive overtime claims, provided no changes in earnings of men, or no crews taken off and reduced.

### ARTICLE E.

Increases requested to apply to all special or incidental rates not specified.

For all special and incidental service in passenger and freight service not specifically covered by this award a percentage of increase is hereby granted as follows:

	Per cent.
Passenger conductors	. 8.2
Baggagemen	. 6.4
Passenger flagmen or rear brake	-
men	
Passenger brakemen	. 6.7
Through freight conductors	. 10.1
Through freight flagmen	5.7
Through freight brakemen	
Local freight conductors	. 13. 2
Local freight flagmen	. 7.1
Local freight brakemen	11 1

It is not the intention of this article to reclassify any service within existing schedules except as reclassified by this award, nor to increase special allowances based on the standard mileage, hourly, or daily rates.

The board finds itself unable from the evidence before it to make uniform rules for multiple unit electric service, but it is awarded that where standard rates now obtain the standard rates fixed by this award shall apply, and where special rates exist, that such special rates shall take the percentage of increase given by this article; provided that in no case shall the rates so increased be carried above the standard rates fixed by this award.

Where on any road lower rates than the standard or prevailing rates were established by the Clark-Morrissey award in 1910, the same percentage of wage differentials will obtain under this award, but

all other conditions except rates will be superseded by this award. It is intended that in no case shall the rates so increased be carried above the standard rates fixed

by this award.

This board is uninformed as to the precise range of effect of the Clark-Morrissey award. This board does not intend to open up any question as to standardization of rates not directly connected with the Clark-Morrissey award. Any dispute arising out of this exception may be submitted to this board or a subcommittee thereof for final decision. Such sub-mission shall be in writing. A statement should be agreed upon, and if not agreed upon, then the differences should be recited in detail.

## ARTICLE F.

Through and irregular freight service to be paid as follows, per mile:

Through and irregular freight work. construction, snowplow, circus, or wreck train service, to be paid as follows, per mile:

	Cents.
Conductors	4.18
Flagmen	. 2.88
Brakemen	. 2.78

Conductors..... 4. 00 Flagmen . . . . . . . . . . . . . . . . . 2. 67 Brakemen..... 2. 67

Runs of 100 miles or less, either straightaway or turn around, to be paid for as 100 miles.

Runs of 100 miles or less, either straightaway or turn around, to be paid for as 100 miles.

Conductors..... 4. 50

#### ARTICLE G.

Way, pick-up, or drop, mine and roustabout, to be paid as follows, per mile:

	Cents.
Conductors	4.84
Flagmen	
Brakemen	. 3.21
One hundred miles or less to con-	stitute

One hundred miles or less to constitute a day.

a day.

#### ARTICLE H.

Work, construction, wreck, circus, and snowplow train crews to be paid as

Through and irregular freight service rates awarded as follows, per mile:

tollows, per day.	
Conductors\$4.	50
Flagmen 3.	10
Brakemen	00

	Cents	
Conductors	. 4.00	0
Flagmen		
Brakemen		

### ARTICLE I.

In all classes of service, other than passenger, 100 miles or 10 hours or less shall constitute a day's work. Overtime shall be paid for at the rate of 15 miles an hour.

This request was allowed with the exception that overtime should be paid for at a speed of 10 miles an hour. Railroads also authorized to run crews in a number of short runs, provided their mileage in the aggregate does not exceed 100 miles, or their time on duty does not exceed 10 hours.

### ARTICLE J.

Milk, helper, and other classes of service to be given the same rate of increase as given in through freight service.

This request was practically allowed and included in Article E, which makes provision for increases in incidental and mixed service corresponding to the rates of increase granted in specified services. (See Article E.)

### ARTICLE K.

Regularly assigned men shall be guaranteed 100 miles, or 10 hours for each calendar day in the month.

This request was granted, with the provision also that crews receiving a guarantee may be used in other classes of service if there is nothing to do in their own class of service.

### ARTICLE L.

Deadheading in freight or passenger service to be paid for at rates of service in which conductors and trainmen are regularly engaged. Trainmen running with light engines or engine and caboose will be paid full through freight rate.

Conditions shall be continued on the various roads in accordance with existing schedules, unless modified by mutual agreement.

### ARTICLE M.

Unassigned freight crews held away from home terminals longer than 12 hours will be paid at the rate of 10 miles an hour at through freight rates for the time so held, to be computed up to one hour before the departure of the train on which they resume duty.

Conductors and trainmen in pool freight and unassigned freight service to receive continuous overtime at the rate of their last service after they have been held away from their home terminal 18 hours from time relieved from previous duty. If held 14 hours after the first 28 hours, they will be paid continuous time for the next 10 hours, and similarly for each 24 hours thereafter. When called for duty after this pay begins, they shall be paid continuous time. Railroads required to designate home terminals for all crews.

### ARTICLE N.

Time and one-half for crews handling double-headed trains of two engines requested. This request was denied.

### ARTICLE O.

Chicago standard of rates requested for yard service—10-hour day, time and onehalf for overtime. Eastern classification of yards to be maintained. One cent an hour increase granted to yard employees, provided increased rates do not exceed Chicago yard rates. Time and one-half for overtime denied.

## ARTICLE P.

Rates higher or conditions better on certain roads which are affected by the requests of the men or award of the board not to be reduced. Earnings of conductors and trainmen not to be reduced by the award. Employees not to be allowed, however, to advance their rates of pay by selecting old conditions and new rates, or vice versa.

### ARTICLE Q.

Existing schedules or agreements shall This request was sanctioned by the not be changed except as they are herein board. specifically amended.

A minority report was filed by L. E. Sheppard and D. L. Cease, officers of the Order of Railway Conductors and the Brotherhood of Railroad Trainmen, who represented these organizations on the arbitration board. The points of disagreement with the majority report which were put forward by these arbitrators were as follows:

1. They considered that the request of the men for time and onehalf for overtime should have been granted, because, they declared, that the men deserved it. They claimed that the railroads could

regulate overtime.

2. Conductors and trainmen should have had a participation in the revenue gains from the development of increased train tonnage because of their increased productivity.

3. Failure of the board to consider conditions prior to adjustments

of 1910 was unwarranted and limited the scope of its findings.

4. Differentials established by the Clark-Morrissey award of 1910 should have been changed because conditions have changed since this award.

5. There should have been a greater degree of standardization.

A dissenting opinion was also filed by W. W. Atterbury, vice president of the Pennsylvania Railroad, and A. H. Smith, vice president of the New York Central lines, who represented the railroads on the board of arbitration. They dissented from the award on the following general grounds:

First. Because "standardization" is chimerical and uneconomic. Second. Such increased cost of living as has occurred is not suffi-

cient to justify the increase granted.

Third. Statistics proved that "risk" had decreased; proved that "hours of labor" had decreased; the weight of evidence was that "labor" had not increased; and they could not agree that it had been proven that anything so intangible as "responsibility" had been increased.

Fourth. The conductors and trainmen were but one of the many factors in efficient railroad operation, and were no more responsible for increased productivity than any other class of railway labor.

# COMPARISON OF THE RESULT OF THE ARBITRATION BY INDIVIDUAL RAILROADS.

In the series of statements which follow a comparison is made of the results of the arbitration on individual railroads which were parties to the proceedings. The general method adopted was to compare the official schedules of rates of pay and working conditions which were in force on each railroad before and after the award of the arbitration board. A comparative statement is shown for each road for which official schedules could be secured.

No comprehensive generalization as to the results of these schedule comparisons can be made, for the evident reason that no standard method of wage payment prevailed. Each transportation company adapted the award to its own method of fixing the basis of compensation. In some instances payments are made on a trip basis, and in

others on a mileage basis. Almost all railroads have special methods of payment for special kinds of service or special runs.

The detailed comparisons, by railroads, are given below. The

railroads are arranged in alphabetical order.

### BALTIMORE & OHIO RAILROAD CO.

On a standard mileage basis as well as on the basis of a minimum monthly guaranty, passenger conductors on this road as a result of the award of the arbitration board had their rates of pay advanced about 8 per cent. Baggagemen (not handling express) in ordinary service were allowed increase from 6.5 to 10 per cent, and passenger brakemen from 6.7 to 9.3 per cent. Conductors running on through freight, work, and wreck trains secured advances in compensation on a mileage basis of 10.1 per cent; brakemen, 6.2 per cent; flagmen, 5.7 per cent.

In local, pick-up, and mixed freight train service, rates of pay to conductors were advanced 13.2 per cent; to brakemen, 11.1 per cent; and to flagmen, 7.1 per cent. Advances in rates of pay for these same classes of service computed on a run or mileage basis were somewhat less in the case of conductors and flagmen than those made on a day-

payment basis.

Amount and per cent of increase in rates of pay of conductors and trainmen, as a result of the award of the board of arbitration, effective Nov. 10, 1913.

Condu				
Class of service.	Class of service. Rate.		Increase.	
	1912	1913	Amount.	Per cent.
Passenger: Standard (1913, 155 miles or over), per mile  Emergency: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours or less than 10.  Regularly assigned passenger trainmen, monthly guaranty, per month. Freight: Through freight, work and wreck train, per mile Local, pick-up and mixed, per mile Landenburg Branch, per month. Circus train (single move), 2 minimum Circus train (terminal), per mile. Yard: Average rate for groups 2, 3, and 4, day and night, per hour. Chicago yard: Day, per hour. Night, per hour.	2. 10 4. 20 125. 00 125. 00 . 0363 . 03975 120. 45 4. 8279 . 0363 . 37	\$0.029 .45 2.25 4.50 135.00 .04 .045 120.45 5.32 .04 .38 .40	\$0.0022  • .03	8. 2 7. 1 7. 1 7. 1 8. 0 10. 1 13. 2 0 10. 2 10. 1 2. 7 . 0 . 0
	Baggagemen (express).			).
Class of service.	Ra	te.	Incr	ease.
	1912	1913	Amount.	Per cent.
Passenger: Standard (1913, 155 miles or over), per mile	\$0.0165 79.00	<b>\$</b> 0. 0175 <b>8</b> 6. 50	\$0.001 7.50	6. 1 9. 5

<sup>&</sup>lt;sup>1</sup> Service in excess of 100 miles not considered emergency work.
<sup>2</sup> Based on allowance of 133 miles at through freight rate, overtime after 12 hours.

Amount and per cent of increase in rates of pay of conductors and trainmen, as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

,	Baggagemen.				
Class of service.		Rate.		Increase.	
	1912	1913	Amount.	Per cent.	
Passenger: Standard (1913, 155 miles or over), per mile Emergency: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours or less than 10. Regularly assigned passenger trainmen, monthly guaranty, per month. Baltimore and Washington (minimum of 95 trips per month), per trip. Pittsburgh and Cumberland, per month. Pittsburgh and Wheeling, per month.	\$0. 0155 . 24 1. 20 2. 65 75. 00 . 78 86. 00 86. 00	\$0. 0165 . 275 1. 375 2. 75 82. 50 . 78 86. 00 86. 00	\$0.001 .035 .175 .10 7.50 .00 .00	6.5 14.6 14.6 3.8 10.0	

		Brak	emen.	
Class of service.	Ra	ite.	Increase.	
	1912	1913	Amount.	Per cent.
Passenger: Standard (1913, 155 miles or over), per mile Emergency:	\$0.015	\$0.016	\$0.001	6.7
	. 24	. 255	. 015	6.3
One hour or less	1.20	1.275	. 075	6.3
Over 5 hours or less than 10.  Regularly assigned passenger trainmen, monthly guaranty,	2. 55	2, 55	.00	.0
per month.  Baltimore and Washington (minimum of 95 trips per month),	70.00	76. 50	6. 50	9.3
per trip	. 74	74	.00	.0
Frederick and Washington Junction (all runs), per month Freight:		78. 75	.00	.0
Through freight, work and wreck train, per mile	. 0242	. 0267	. 0025	10.3
Local, pick-up and mixed, per mile	. 027	. 03	.003	11.1
Circus train (single move), minimum.		3. 5511	. 3325	10.3
Circus train (terminal), per mile	.0242	. 0267	. 0025	10.3
hour. Chicago yard:	.34	. 35	.01	2.9
Day, per hour	. 35	. 35	.00	.0
Night, per hour		.37	.00	.0

	,	Flag	men.	
Class of service.		Rate.		ease.
		1913	Amount.	Per cent.
Freight: Through freight, work and wreck train, per mile Local, pick-up and mixed, per mile. Circus train (single move), minimum Circus train (terminal), per mile.	3.35825	\$0. 0267 . 03 3. 5511 . 0267	\$0.00145 .002 .19285 .00145	5. 7 7. 1 5. 4 5. 7

<sup>1</sup> Service in excess of 100 miles not considered emergency work.

\* Based on allowance of 133 miles at through freight rate, overtime after 12 hours.

# Rates of pay of conductors and trainmen.

Class of service.	Condu	ictors.	Baggagemen (express).		
	1912	1913	1912	1913	
Passenger: Standard (1913, 155 miles or over), per mile. Runs of less than 155 miles, per day Emergency: 1		\$0.029 4.50	\$0.0165	\$0.0175 2.90	
One hour or less Over 1 hour and 5 hours or less Over 5 hours or less than 10 Regularly assigned passenger trainmen, monthly guaranty, per	2.10 4.20	. 45 2. 25 4. 50			
month. OVERTIME.	125.00	135.00	79.00	86.50	
Standard (20 miles equal 1 hour), per hour	. 42	.45			

Class of service.		gemen.	Flag	men.	Brakemen.	
Class of service.	1912	1913	1912	1913	1912	1913
Passenger: Standard (1913, 155 miles or over), per mile Runs of less than 155 miles, per day One hour or less. Over 1 hour and 5 hours or less Over 5 hours or less than 10 Regularly assigned passenger trainmen, monthly guaranty, per month. Baltimore and Washington (minimum of 95 trips per mouth), per trip. Frederick and Washington Junction (all runs), per month. Pittsburgh and Cumberland, per month. Pittsburgh and Wheeling, per month.	\$0. 0155 .24 1. 20 2. 65 75. 00 .78 .86. 20 86. 00	\$0.165 2.75 ,275 1.375 2.75 82.50 .78		\$0.016 2.60 .26 1.30 2.60 78.00	\$0.015 .24 1.20 2.55 70.00 .74 78.75	\$0.016 2.55 .255 1.275 2.55 76.50 .74 78.75
OVERTIME.  Standard (20 miles equal 1 hour), per hour	. 25	. 275		. 26	. 24	25.5

	Condu	ictors.	Flag	men.	Brakemen.		
Class of service.	1912	1913	1912	1913	1912	1913	
Through freight, work, and wreck train, per mile. Local, pick-up, and mixed, per mile. Landenberg Branch, per month. Circus train <sup>2</sup> (single move), minimum. Circus train, terminal, per mile.	\$0.0363 .03975 120.45 4.8279 .0363	\$0.04 .045 120.45 5.32 .04	\$0.02525 .028 3.35825 .02525	\$0.0267 .03 3.5511 .0267	\$0.0242 .027 3.2186 .0242	\$0.0267 .03 3.5511 .0267	
OVERTIME.  Through freight, per hour Local, pick-up, and mixed, per hour Yard service, per hour: Group 1—	.363	.40 .45	. 2525	. 267	. 242	. 267	
Day Night Group 2—	.38	.38			.35	.35	
Day Night Group 3—	. 37	.38			.34	.35 .37	
Day Night	.36	.37			. 33 . 35	.34 .36	
Group 4— Day Night	. 35 . 37	.36			.32	.33	

Service in excess of 100 miles not considered emergency work.
 Based on allowance of 133 miles at through freight rates, overtime after 12 hours.

# BALTIMORE & OHIO SOUTHWESTERN RAILROAD CO.

The advances secured by different classes of employees on the Baltimore & Ohio Southwestern Railroad were practically the same, as can be readily seen from the table below, as those which have already been discussed in connection with the showing for the Baltimore & Ohio Railroad.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Cond	actors.		
Class of service.	Ra	ite.	Increase.		
	1912	1913	Amount.	Per cent.	
Passenger, standard, per mile. Emergency: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours or less than 10 hours. Regularly assigned passenger trainmen (monthly guaranty), per month. Freight and miscellaneous: Through freight, work and wreck train, per mile. Local, pick-up, and mixed, per day. Circus, single run, per run. Circus, straightaway run from terminal to terminal, per mile. Yard, average rate for groups 1, 2, and 3, day and night, per day.	\$0.0268 . 42 2.10 4.20 125.00 . 0363 3.975 2 4.8279 . 0363 3.70	\$0.029 . 45 2.25 4.50 135.00 . 04 1 4.50 2 5.32 . 04 3.80	\$0.0022 .03 .15 .30 10.00 .0037 .525 .4921 .0037 .10	8. 2 7. 1 7. 1 7. 1 8. 0 10. 2 13. 2 10. 2 2. 7	
	Baggagemen (express).				
Class of service.	Rate.		Increase.		
	1912	1913	Amount.	Per cent.	
Passenger, standard, per mile	\$0.0165 79.00	\$0. 0175 86. 50	\$0.001 7.50	6.1	
		Bagga	gemen.		
Class of service.	Ra	ite.	Increase.		
	1912	1913	Amount.	Per cent.	
Passenger, standard, per mile. Emergency: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours or less than 10 hours. Regularly assigned passenger trainmen (monthly guaranty), per month.	\$0. 0155 . 24 1. 20 2. 65 75. 00	\$0. 0165 . 275 1. 375 2. 75 82. 50	\$0,001 .035 .175 .10 7.50	6.5 14.6 14.6 3.8 10.0	

<sup>&</sup>lt;sup>1</sup> Mileage figures converted into daily figure sby application of rule that 100 miles or less constitute a day's work.

<sup>2</sup> Minimum.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

	Brakemen.						
Class of service.	class of service. Rate. I		Incr	ease.			
	1912	1913	Amount.	Per cent.			
Passenger, standard, per mile.  Emergency: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours or less than 10 hours.  Regularly assigned passenger trainmen (monthly guaranty), per month.  Freight and miscellaneous: Through freight, work and wreck train, per mile. Local, pick-up, and mixed, per day. Circus, single run, per run. Circus, straightaway run from terminal to terminal, per mile. Yard, average rate for groups 1, 2, and 3, day and night, per day.	\$0.015 .24 1.20 2.65 70.00 .0242 2.70 13.2186 .0242 3.40	\$0.016 .255 1.275 2.65 76.50 .0267 3.00 13.5511 .0267 3.50	\$0.001 .015 .075 .00 6.50 .0025 .30 .3325 .0025 .10	6.7 6.3 6.3 .0 9.3 10.3 11.1 10.3 10.3 2.9			

		Flag	men.	
Class of service.		ite.	Incr	ease.
·	1912	1913	Amount.	Per cent.
Freight and miscellaneous: Through freight, work and wreck train, per mile. Local, pick-up, and mixed, per day. Circus, single run, per run. Circus, straightaway run from terminal to terminal, per mile.	2.80 13.35825	\$0.0267 3.00 1 3.5511 3.0267	\$0.00145 .20 .19285 .00145	5. 7 7. 1 5. 7 5. 7

# Rates of pay of conductors and trainmen.

Class of service.	Condi	actors.	Baggagemen (express).	
		1913	1912	1913
Passenger: Standard (1913, 155 miles or over), per mile Runs of less than 155 miles, per day. Emergency:  One hour or less. Over 1 hour and 5 hours or less. Over 5 hours or less than 10 hours. Regularly assigned passenger-train men, monthly guaranty, per month. Freight and miscellaneous: Through freight, work, and wreck train, per mile. Local, pick-up and mixed, per day. Circus, single run, per run.	. 42 2. 10 4. 20 125. 00 . 0363 3. 975 1 4. 8279	\$0.029 4.50 .45 2.25 4.50 135.00 .04 4.50 1.5.32	\$0.0165 79.00	2. 90 86. 50
Circus, straightaway run from terminal to terminal, per mile.	. 0363	.04		,
Passenger, standard, per hour. Freight, through freight, work, and wreck train service, per hour.	.42	.45		

Minimum.
 Service in excess of 100 miles not considered emergency work.
 Overtime pro rata.
 Mileage figures converted into daily figures by application of rule that 100 miles or less constitute a day's work.

Rates of pay of conductors and trainmen—Continued.

	Bagga	gemen.	Flag	men.	Brakemen.		
Class of service.	1912	1913	1912	1913	1912	1913	
Passenger: Standard (1913, 155 miles or over), per mile. Runs of less than 155 miles, per day. Emergency: \(^1\) One hour or less		\$0.0165 2.75 .275 1.375 2.75 82.50	\$0.02525 2.80 3.35825 .02525	\$0.016 2.60 .26 1.30 2.60 78.00 .0267 3.00 3.5511 .0267	\$0.015 .24 1.20 2.65 70.00 .0242 2.70 3.2186 .0242 .24	\$0.016 2.55 2.55 1.275 2.55 76.50  .0267 3.00 2.3.5511 .0267 .255 .267	
Yard service.	Gro	up 1.	Gro	ıp 2.	Gro	ıp 3.	
	1912	1913	1912	1913	1912	1913	
Day conductors, per day Night conductors, per day Day brakemen, per day Night brakemen, per day.	3.90 3.40	\$3.80 4.00 3.50 3.70	\$3.60 3.80 3.30 3.50	\$3.70 3.90 3.40 3.60	\$3.50 3.70 3.20 3.40	\$3.60 3.80 3.30 3.50	

<sup>&</sup>lt;sup>1</sup> Service in excess of 100 miles not considered emergency work.

### BESSEMER & LAKE ERIE RAILROAD CO.

Rates paid conductors on through freight and regular trains on this road were not increased by the arbitration award, but in minerun service, conductors were advanced 7.1 per cent; and in local and pick-up service, 2.3 per cent.

Flagmen in mine-run service were advanced 9.5 per cent by the award; and brakemen, 14.5 per cent. Brakemen on local freight trains had their rates increased 11.1 per cent; and flagmen, 7.1 per

cent.

<sup>&</sup>lt;sup>2</sup> Overtime pro rata.

<sup>3</sup> Minimum.

NOTE.—Increases in 1913 over 1910 for service not specified are shown in article E of the award in terms of percentages.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

	Conductors.					Fla	gmen.		
Class of service.	Rs	ite.	te. Increase. Rate.			Incre	Increase.		
	1912	1914	Amount.	Per cent.	1912	1914	Amount.	Per cent.	
Excursion and nonrevenue, per day. Through freight, per mile. Wreeking, per mile.	. 04	\$4.60 1.04 .04 .045	\$0.00 .00 .00	0.0 .0 .0 7.1	\$2.65 .0274	\$2.65	\$0.00	0.0	
Mine, per mile Local, pick-up, per mile	.044	. 045	.001	2.3	.028	.03	.002	7.1	
		Bral	cemen.			Bagga	gagemen.		
Class of service.	Ra	ite.	Incre	ase.	Ra	ite.	Increase.		
	1912	1914	Amount.	Per cent.	1912	1914	Amount.	Per cent.	
Excursion and nonrevenue, per day Through freight, per mile Wrecking, per mile. Mine, per mile. Local, pick-up, per mile.	\$2.55 .026 .026 .0262 .027	\$2.55 1.0267 .0267 .03 .03	\$0.00 .0007 .0007 .0038 .003	0. 0 2. 7 2. 7 14. 5 11. 1	\$3.00	\$3.00	\$0.00	0.0	
		For	emen.			He	lpers.		
Class of service.	Ra	ite.	Incre	ase.	Ra	ite.	Incre	ase.	
	1912	1914	Amount.	Per cent.	1912	1914	Amount.	Per cent.	
Yard, average day and night, per hour.	\$0.38	\$0.39	\$0.01	2.6	\$0.35	\$0.36	\$0.01	2.9	

<sup>1</sup> Includes work, construction, circus, and snowplow service.

# Rates of pay of conductors and trainmen.1

	Condu	Conductors. Flagmen.		Brakemen.		Bagga	gemen.	
Class of service.	1912	1914	1912	1914	1912	1914	1912	1914
Passenger, per day. Excursion and nonrevenue, per day. Through freight, cents per mile. Wrecking, cents per mile. Mine, cents per mile. Local pick-up, cents per mile. Regularly assigned passenger train- men, monthly guaranty.	\$4.60 4.60 4.00 4.00 4.20 4.40	(2) \$4.60 \$4.00 4.00 4.50 4.50	\$2.65 2.65 2.74 2.80	(2) \$2.65 3.00 3.00 78.00	\$2.55 2.55 2.60 2.60 2.62 2.70	(2) \$2.55 \$2.67 2.67 3.00 3.00 76.50	\$3.00	\$3. <sub>.</sub> 00
	Yard ra	tes.					1912	1914
Day foremen. Day helpers. Night foremen. Night helpers.							Cents. 37 34 39 36	Cents. 38 35 40 37

Ten hours or less constitute a day; overtime paid pro rata on basis of actual minutes.

1 Trainmen regularly assigned to excursion service receive a monthly guaranty, per month, of 26 days.

2 Rates and accompanying conditions in effect prior to award apply to Nos. 9, 10, 11, 14, and south-end passenger runs; rates and accompanying conditions of the award, fixing a rate of 2.9 cents for conductors, 1.65 cents for flagmen, and 1.6 cents for brakemen, per mile, on runs of 155 miles or over, and a minimum day rate of \$4.50 for conductors, \$2.60 for flagmen, and \$2.55 for brakemen. On all passenger runs apply the following pools or sets of runs: Nos. 1 and 2, 12 and 13, Conneaut Branch, Hilliards Branch, and M. C.

L. & F. Branch.

3 Includes work, construction, circus, and snowplow service.

Note.-Increases in 1913 over 1910 for services not specified are shown in Article E of the award in terms of percentages.

### BOSTON & ALBANY RAILROAD CO.

As a result of a decision of the board of arbitration, passenger conductors on this railroad had their rates of pay advanced approximately 8 per cent; assistant conductors, to 7 per cent; baggagemen, from 6.5 to 10 per cent; flagmen, from 4.9 to 7.6 per cent; and brakemen, from 6.7 to 9.3 per cent. In the through and irregular freight service conductors on a mileage basis secured an increase in rates of compensation of 10.2 per cent, and in local and pick-up freight service conductors received an increase of 13.2 per cent. Conductors in charge of milk trains had their daily and monthly minimum guarantees advanced 7.1 per cent on a standard mileage basis, on the basis of a minimum and monthly day 8.2 per cent. Brakemen on milk trains received advances in rates of pay of approximately 11 per cent, and flagmen of 7 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

	Conductors.					
Class of service.	Ra	ite.	Increase.			
	1910	1913	Amount.	Per cent.		
Passenger: Standard, per mile. Minimum allowance, per day. Monthly guaranty, regularly assigned passenger trainmen, per month. In cases of emergency, regular men called for service, and in addition to their regular runs between trips will be paid following guaranty: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours  Freight: Through and irregular, per mile. Local, pick-up and drop, per day. Milk: Rate per mile. Daily, minimum Monthly minimum Monthly minimum Monthly minimum Yard, average rate for groups 1 and 2, day and night, per hour.	2. 10 4. 20 . 0363 3. 975 . 0268 4. 20 109. 20	\$0.029 4.50 .135.00 .45 2.25 4.50 2.04 4.50 .029 4.50 117.00	\$0.0022 .30 10.00 .03 .15 .30 .0037 .525 .0022 .30 7.80	8. 2 7. 1 8. 0 7. 1 7. 1 7. 1 10. 2 13. 2 8. 2 7. 1 7. 1 2. 7		

	Assistant conductors.						
Class of service.	Ra	ite.	Increase.				
	1910	1913	Amount.	Per cent.			
Passenger: Standard, per mile. Minimum allowance, per day. Monthly guaranty, regularly assigned passenger trainmen, per month. In cases of emergency, regular men called for service, and in addition to their regular runs between trips will be paid	\$0. 0215 3. 35 100. 00	\$0. 023 3. 57 106. 60	\$0.0015 . 22 6.60	7. 0 6. 6 6. 6			
following guaranty: One hour or less. Over 1 hour and 5 hours or less. Over 5 hours.	. 33 1. 65 3. 35	. 357 1. 785 3. 57	.027 .135 .22	8. 2 8. 2 6. 6			

1 Runs of 100 miles or less not considered emergency.

<sup>&</sup>lt;sup>2</sup> Includes work, construction, snowplow, circus, and wreck train service.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913 -Continued.

		Bagga	gemen.	
Class of service.	Ra	ite.	Iner	ease.
	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile. Minimum allowance, per day. Monthly guaranty, regularly assigned passenger trainmen,	\$0. 0155 2. 75	\$0. 0165 2. 75	\$0.001	6, 5 0. 0
per month. In cases of emergency, regular men called for service, and in addition to their regular runs between trips will be paid following guaranty:	75. 00	82. 50	7.50	10.0
One hour or less. Over 1 hour and 5 hours or less. Over 5 hours	. 27 1. 35 2. 75	. 275 1. 375 2. 75	.005 .025 .00	1.9 1.9 0.0
	R			
Class of service.	Ra	ite.	Incr	ease.
	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile	\$0,01525	\$0.016	\$0.00075	4.9
per month.  Freight:	72. 50	78.00	5. 50	7. 6
Local, pick-up and drop, per day	2. 80	2.0267 3.00	.00145	5. 7 7. 1
Rate per mile Daily minimum Monthly minimum	. 018 2. 85 74. 10	. 0193 3. 05 79. 30	0013 . 20 5. 20	7. 2 7. 0 7. 0
	-	Brak	emen.	
Class of service.	Ra	ite.	Iner	ease.
	1910	1913	Amount.	Per cent
Passenger: Standard, per mile Minimum allowance, per day	\$0.015 2.55	\$0.016 2.55	\$0.001 .00	6, 1 0, 0
Monthly guaranty, regularly assigned passenger trainmen, per month	70.00	76. 50	6. 50	9, 3
One hour or less. Over 1 hour and 5 hours or less. Over 5 hours.	. 25 1. 25 2. 55	. 25 1. 25 2. 575	.00 .00 .025	C. 0 O. 0 1. 0
Freight: Through and irregular, per mile Local, pick-up and drop, per day	. 0242 2. 70	2.0267 3.00	.0025	10.3 11.1
Rate per mile.  Daily minimum.  Monthly minimum.  Yard, average rate for groups 1 and 2, day and night, per hour.	. 017 2. 75 71. 50 . 34	. 0189 3. 05 79. 30 . 35	.0019 .30 7.80 .01	11. 2 10. 9 10. 9 2. 9

Runs of 100 miles or less, either straightaway or turn around, to be paid for as 100 miles.
 Includes work, construction, snowplow, circus, and wreck train service.

# Rates of pay of conductors and trainmen.

Passenger service.	Standard rate per mile.		Minimu ance p	m allow- er day.	passeng	assigned ger train- monthly	Overtime per hour.		
	1910	, 1913	1910	1913	1910	1913	1910	1913	
Conductors	Cents. 2.68 2.15 1.55 1.525 1.50	Cents. 2.9 2.3 1.65 1.6 1.6	\$4.20 3.35 2.75	\$4.50 3.57 2.75 2.60 2.55	\$125.00 100.00 75.00 72.50 70.00	\$135.00 106.60 82.50 78.00 76.50	Cents. 42 33 25 24 24	Cents. 45 35.7 27.5 26 25.5	

In cases of emergency regular men called for service and in addition to their regular runs between trips paid following guaranty:

Passenger service.	Condu	Conductors.		Assistant conductors.		Baggagemen.		Flagmen.		Brakemen.	
	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913	
One hour or less Over 1 hour and 5 hours or less Over 5 hours	\$0.42 2.10 4.20	\$0.45 2.25 4.50	\$0.33 1.65 3.35	\$0.357 1.785 3.57	\$0.27 1.35 2.75	\$0.275 1.375 2.75		\$0.26 1.30 2.60	\$0.25 1.25 2.55	\$0.25 1.255 2.575	

Over 1 hour and 5 hours or lessOver 5 hours	2.10 4.20	2.25 4.50	1.65 3.35	1,785 3,57	1.35 2.75	1.375 2.75			30 1.2 60 2.5		
	Freig	ht service	) <b>.</b>				th and ir		Local freight—pick- up and drop serv- ice (per day).		
					•	1910 1	1913	13	1910 ²	1913 2	
Conductors. Flagmen Brakemen						Cents 3.63 2.52 2.42	25 2	ts, 1.00 2.67 2.67	\$3.975 2.80 2.70	\$4.50 3.00 3.00	
Rate per mile.						Daily	minimu	m.	Monthly	minimum.	
MIIK Se	Milk service.				1913	1910	191	13	1910	1913	
Conductor				Cents. 2.68 1.80 1.70	Cents. 2.90 1.93 1.89	\$4.2 2.8 2.7	35 3	1.50 3.05 3.05	\$109.20 74.10 71.50	\$117.00 79.30 79.30	
	37					G	roup 1.		Group 2.		
	rar	d service.				1910	191	13	1910	1913	
Day conductors Day brakemen Night conductors Night brakemen					3	. Cen 37 34 39 36	38 35 40 37	Cents. 35 32 37 34	Cents. 36 33 38 35		
170 0 - 210	00 21		41						100 21		

Runs of 100 miles or less, either straightaway or turn-around, paid for as 100 miles.
 Mileage in excess of 100 miles in any day paid for in addition pro rata
 Includes work, construction, snowplow, circus, and wreck train service.

In all yards 10 hours or less constitutes a day's work; overtime computed for each employee on the basis of actual overtime worked or held for duty pro rata.

### BOSTON & MAINE RAILROAD CO.

Passenger conductors working on the basis of a standard day of 155 miles were advanced 8.2 per cent as a result of the findings of the board of arbitration, while those working on assigned runs on a monthly guarantee received an increase in rates of pay of \$11 per month or 9.6 per cent. Through and irregular freight conductors had their rates of pay increased 10.2 per cent; and local or way freight

conductors, 13.2 per cent.

Over 5 hours.....

Baggagemen on regularly assigned runs were allowed an increase of 11.6 per cent, or \$8 per month, while those working on a mileage basis received an increase of 6.5 per cent. Passenger brakemen on regularly assigned runs had their monthly guarantee increased \$6.90, or 10.7 per cent, and their mileage rate increased 6.7 per cent. Brakemen on through freight trains were advanced 10.3 per cent, and on local or way freight, 11.1 per cent. Flagmen in through freight and way freight service had their rates of pay increased 5.7 to 7.1 per cent, respectively.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	ictors.			
Class of service.	Ra		Increase.			
	1912	1913	Amount.	Per cent.		
Passenger: Standard, per mile Standard, per day. Regularly assigned passenger trainmen, monthly guaranty, 28 days. Freight: Through and irregular, per mile. Way (75 miles or less), per mile. Yard, average rate for groups 1, 2, and 3, day and night, per hour. Emergency: One hour or less. Over 1 hour, and 5 hours or less. Over 5 hours.	4. 20 115. 00 . 0363 . 03975 . 37 . 42 2. 10	\$0. 029 4. 50 126. 00 . 04 . 045 . 38 . 45 2. 25 4. 50	\$0.0022 .30 11.00 .0037 .00525 .01 .03 .15 .30	8. 2 7. 1 9. 6 10. 2 13. 2 2. 7 7. 1 7. 1		
	Assistant conductors.					
Class of service.	Ra	ite.	Increase.			
	1912	1913	Amount.	Per cent.		
Passenger: Standard, per mile Standard, per day. Regularly assigned passenger trainmen, monthly guaranty, 28 days. Emergency:	3.35	\$0.023 3.57 100.00	\$0.0015 .22 8.00	7. 0 6. 0 8. 7		
One hour or less Over 1 hour, and 5 hours or less		. 357 1. 785	. 027	8		

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

		Bagga	gemen.		
Class of service.	Ra	te.	Incr	ease.	
	1912	1913	Amount.	Per cent.	
Passenger: Standard, per mile Standard, per day Regularly assigned passenger trainmen, monthly guaranty, 28 days. Emergency: One hour or less. Over 1 hour, and 5 hours or less. Over 5 hours	1.35	\$0. 0165 2. 75 77. 00 . 275 1. 375 2. 75	\$0.001 .00 8.00 .005 .025 .00	6. 5 0. 0 11. 6 1. 9 1. 9 0. 0	
	Fla	gmen or re	ear brakem	en.	
Class of service.	Ra	te.	Increase.		
	1912	1913	Amount.	Per cent.	
Freight: Through and irregular, per mile. Way (75 miles or less), per mile.	\$0.02525 .028	\$0.0267 .03	\$0.00145 .002	5. 7 7. 1	
•		Brak	emen.		
Class of service.	Ra	te.	Increase.		
•	1912	1913	Amount.	Per cent.	
Passenger: Standard, per mile Standard, per day. Regularly assigned passenger trainmen, monthly guaranty,	2, 55	\$0.016 2.55	\$0.001 .00	6. 7 0. 0	
28 days. Freight: Through and irregular, per mile. Way (75 miles or less), per mile. Yard, average rate for groups 1, 2, and 3, day and night, per hour.	64. 50	71. 40 . 0267 . 03 . 35	6. 90 . 0025 . 003 . 01	10.7 10.3 11.1 2.9	
Emergency: One hour or less. Over 1 hour, and 5 hours or less. Over 5 hours.	1. 25	. 255 1. 275 2. 55	.005 .025 .00	2. 0 2. 0 0. 0	

# Rates of pay of conductors and trainmen.

	Rate per mile.		Rate per day.				Hours per		Overtime		Minimum monthly (28	
Passenger service.			1912		1913		day.		per hour.		days) rates (exclusive of overtime).	
	1912	1913	Mile- age.	Rate.	Mile- age.	Rate.	1912	1913	1912	1913	1912	1913
Conductors	\$0.0268 .0215 .0155	.023	157 157 177		155	3.57		10	.33			100.00
Flagmen or rear brakemen. Brakemen	.015	.016	170	2.55	162 159	2.60 2.55	10 10			. 26 . 255	64.50	72.80 71.40

# Rates of pay of conductors and trainmen—Continued.

					Rate per	mile.	
- Freight ser	vice.1				1912	1913	
Through and irregular: Conductors Flagmen Brakemen Way freight: Conductors Flagmen Brakemen Brakemen				{	\$0.0363 .02525 .0242 2.03975 \$.048 2.028 \$.036 2.027 \$.0346	\$0.04 .0267 .0267 .045 .03	
	Grou	ıp 1.	Grou	ıp 2.	Grou	ıp 3.	
Yard service (per hour).	1912	1913	1912	1913	1912	1913	
Day conductors Day brakemen Night conductors Night brakemen	\$0.37 .34 .39 .36	\$0.38 .35 .40 .37	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	\$0.35 .32 .37 .34	\$0.36 .33 .38 .35	
Emergency service.	One hou	r or less.	Over 1 hours		Over 5 hours.		
Land Sound Section	1912	1913	1912	1913	1912	1913	
Conductors. Assistant conductors Baggagemen. Flagmen or rear brakemen. Brakemen.	. 33	\$0.45 .357 .275 .26 .255	\$2.10 1.65 1.35	\$2. 25 1. 785 1. 375 1. 30 1. 275	\$4.20 3.35 2.75	\$4.50 3.57 2.75 2.60 2.55	

<sup>1 10</sup> hours constitute a day's work (1912).

### BUFFALO, ROCHESTER & PITTSBURGH RAILWAY CO.

Passenger conductors, as the result of this arbitration, received increases in rates of pay ranging from 7.1 to 8.2 per cent. In through freight service advances in rates of pay to conductors amounted to 10.2 per cent, in local and pick-up freight service to 13.2 per cent. and in mine-run service to 24 per cent.

Passenger flagmen, on a standard mileage basis, were advanced 5.3 per cent and on the basis of a minimum monthly guaranty 7.6 per cent. On through freight trains they had their rates of pay increased 5.7 per cent, on local and pick-up freight trains 7.1 per cent,

and in mine-run service 18.8 per cent.

Rates to brakemen in passenger service were from 6.3 to 9.3 per cent greater after the award of the arbitration board. Brakemen on through freight trains had their rates of pay advanced 5.7 per cent, in local and pick-up freight train 7.1 per cent, and in mine-run service 24 per cent.

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<sup>2 75</sup> miles or less.3 Rate per additional mileover 75 miles.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Conductors.					
Class of service.	Ra	te.	Increase.				
	1910	1913	Amount.	Per cent.			
Passenger, standard runs (1913, 155 miles or over), per mile	\$0.0268	\$0.029	\$0.0022	8.2			
Emergency service: 1 hour or less. More than 1 hour and less than 5 2.	. 42	. 45	. 03	7.1			
More than 1 hour and less than 5 <sup>2</sup>	2.10 4.20	2. 25	. 15	7.1			
Regularly assigned passenger-train men, monthly guaranty	125. 00	4, 50 135, 00	10.00	7.1 8.0			
Freight, through and irregular, work, construction, and wreck train service (snowplow and circus, 1910), per mile	. 0363	.04	.0037	10.2			
Helvetia, Iselin, Lucerne, Vintondale, and mine-run trains of similar class (1910), mine service (1913), per mile Local freight, pick-up, and drop service: Le Roy run, Warsaw	. 0363	.045	.0087	24.0			
run, Rochester, Le Roy, Du Bois, Curwensville, and East Salamanca-Freeman runs, per day Phrough freight crews required to pick up or set off cars, load	3. 975	4. 50	. 525	13. 2			
or unload freight at more than 4 points on any division (localfreight rates), per day	3.975	4.50	. 525	13, 2			

		Flagmen.					
Class of service.	Ra	te.	Increase.				
	1910	1913	Amount.	Per cent.			
Passenger, standard runs (1913, 155 miles or over), per mile Emergency service:	\$0.0152	\$0,016	\$0.0008	5.3			
1 hour or less.  More than 1 hour and less than 5 2.  Regularly assigned passenger-train men, monthly guaranty  Freight, through and irregular, work, construction, and wreck-	. 24 1. 20 72. 50	. 26 1. 30 78. 00	.02 .10 5.50	8.3 8.3 7.6			
train service 3 (snowplow and circus, 1910), per mile	. 02525	. 0267	. 00145	5.7			
similar class (1910), mine service (1913), per mile.  Local freight, pick-up, and drop service: Le Roy run, Warsaw run, Rochester, Le Roy, Du Bois, Curwensville, and East	.02525	.03	.00475	18.8			
Salamanca-Freeman runs, per day  Through freight crews required to pick up or set off cars, load	2.80	3.00	. 20	7.1			
or unload freight at more than 4 points on any division (local freight rates), per day	2.80	3.00	. 20	7.1			

		<u> </u>		1			
		Brakemen.					
Class of service.	Ra	ite.	Increase.				
	1910	1913	Amount.	Per cent.			
Passenger,¹ standard runs (1913, 155 miles or over), per mile Emergency service: 1 hour or less		\$0.016 . 255	\$0.001 .015	6. 7 6. 3			
More than 1 hour and less than 5 <sup>2</sup>	1. 20 2. 55 70. 00	1. 275 2. 55 76. 50	. 075 . 00 6. 50	6.3 .0 9.3			
train service, (snowplow and circus, 1910), per mile	.0242	. 0267	.0025	10.3 24.0			
similar class (1910), mine service (1913), per mile.  Local freight, pick-up, and drop service: Le Roy run, Warsaw run, Rochester, Le Roy, Du Bois, Curwensville, and East Salamanca-Freeman runs, per day.  Through freight crews required to pick up or set off cars, load	2.70	3.00	.30	11, 1			
or unload freight at more than 4 points on any division (local freight rates), per day.	2, 70	3, 00	.30	11.1			

These rates (1913) to obtain whenever the miles made at such rates in a day amount to a greater sum than the minimum day rates awarded.
 Service in excess of 100 miles not considered as emergency service.
 Not specifically mentioned in 1913 rate schedule.
 Assumed to be mine runs.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

		Foremen.					
Class of service.	Ra	ite.	Incr	ease.			
	1910	1913	Amount.	Per cent.			
Yard service: Average rate for groups 1, 2, and 3, day and night, per hour.	\$0.37	\$0.38	\$0.01	2.7			
	Helpers.						
Class of service.	Ra	ite.	Incr	ease.			
	1910	1913	Amount.	Per cent.			
Yard service: Average rate for groups 1, 2, and 3, day and night, per hour	\$0.34	\$0.35	\$0.01	2.9			

# Rates of pay of conductors and trainmen.

Class of service or run.	Conductors.		Assistant conductors.		Baggagemen.		Flagi	men.	Brakemen.	
	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913
Standard (1913, 155 miles or over), per mile  Emergency service:  1 hour or less.  More than 1 hour and less than 5 2 Over 5 hours.  Minimum, day 8 Regularly assigned passenger trainmen, monthly guaranty, month.  Runs of less than 155 miles, day.	\$0.0268 .42 2.10 4.20 4.20 125.00	\$0.029 .45 2.25 4.50 				275 1.375 2.75 82,50	\$0.0152 .24 1.20 2.65 2.65 72.50	. 26 1. 30 2. 60	\$0.015 .24 1.20 2.55 2.55 70.00	\$0.016 .255 1.275 2.55 76.50 2.55
Excess mileage (1913, after 7 hours 45 minutes), 20 miles per hour. Short-turn runs, not less than 80 miles (overtime after 8 hours).	.42	4.45				5. 275 . 275	. 24	6.26	.24	7. 255 . 255

<sup>These rates (1913) obtain whenever the miles made at such rates in a day amount to a greater sum than the minimum day rates awarded.

Service in excess of 100 miles not considered emergency service.

Effective only when amounting to greater sum than at mileage rate.

After 155 miles.

After 166 miles.

After 162 miles.

Tafter 169 miles.</sup> 

# Rates of pay of conductors and trainmen—Continued.

Condu	ictors.	Flag	men.	Brake	emen.
1910	1913	1910	1913	1910	1913
\$0.0363	\$0.04	\$0.02525	\$0.0267	\$0.0242	\$0.0267
. 0363	.045	. 02525	.03	.0242	.03
3, 975	<sup>2</sup> 4. 50	2.80	<sup>2</sup> 3. 00	2.70	2 3. 00
3, 975	4.50	2, 80	3, 00	2.70	3.00
. 363	.40	. 2525	. 267	. 242	. 267
.363	.45	. 2525	.30	. 242	.30
Gro	ıp 1.	Gro	пр 2.	Grou	ıp 3.
1910	1913	1910	1913	1910	1913
Cents. 37 39 34 36	Cents. 38 4 35 37	Cents. 36 38 33 35	Cents. 37 39 34 36	Cents. 35 37 32	Cents. 36 38 33 35
	1910  \$0.0363 .0363 3.975 3.975 .363 .363 .363 .7910  Ground 1910  Cents. 37 39	\$0.0363 \$0.04  .0363 .045  3.975 24.50  3.975 4.50  .363 .40 .363 .45  .45  Group 1.  1910 1913  Cents. Cents. 37 38 34 35 34 335	\$0.0363 \$0.04 \$0.02525  .0363 .045 .02525  3.975 24.50 2.80  3.975 4.50 2.80  .363 .40 .2525  .363 .45 .2525  .45  Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group 1. Group	\$0.0363 \$0.04 \$0.02525 \$0.0267  .0363 .045 .02525 .03  3.975	\$0.0363 \$0.04 \$0.02525 \$0.0267 \$0.0242  .0363 .045 .02525 .03 .0242  3.975 24.50 2.80 23.00 2.70  3.975 4.50 2.80 3.00 2.70  .363 .40 .2525 .267 .242  .363 .45 .2525 .30 .242

In all yards 10 hours or less constitutes a day's work; overtime computed for each employee on basis of actual overtime worked or held for duty, pro rata.

<sup>1</sup> Not specifically mentioned in 1913 rate schedule.

<sup>2</sup> Figures for 1913, originally given on the mileage basis of pay, have been converted into daily basis by use of accompanying rule that "in all road service, other than passenger service, 100 miles or less constitute a day's work." (Art. 1, 1913–14.)

<sup>3</sup> Basic rates: Conductors, 4.5 cents per mile; flagmen, 3 cents per mile; brakemen, 3 cents per mile. Figures obtained by application of general rule that overtime is paid after 10 hours at rate of 10 miles per

### CENTRAL NEW ENGLAND RAILWAY CO.

Increases in rates of pay in passenger service from the application of the award of the arbitration board on this railway ranged from 6.5 per cent in the case of baggagemen to 8.2 per cent in the case of conductors, computed on the basis of a standard day of 155 miles. Passenger trainmen in regularly assigned monthly service received no advances in rates of pay which obtained prior to the award.

Conductors in through and irregular freight and regular freight service had their rates of compensation increased 10.2 per cent, and on local and pick-up freight trains 13.2 per cent. Yard conductors

received an advance of 2.7 per cent.

Brakemen employed on through and irregular, work and construction, and freight trains were allowed an increase in rates of pay of 10.3 per cent, and in local and pick-up service 11.1 per cent. brakemen, as in the case of conductors, were given an increase of 1 cent an hour, which was equivalent to an advance of 2.9 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Cond	uctors.		Baggagemen.					
Class of service.	Rate.		. Increase.		Ra	ite.	Increase.			
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Passenger, per mile Regularly assigned passenger trainmen, monthly guaranty,		\$0.029	\$0.0022	8, 2	\$0.0155	\$0.0165	\$0.001	6. 5		
per 28 days Through and irregu-	115.00	115.00	.00	.0	69.00	69.00	.00	.0		
lar freight, per mile.	. 0363	.04	.0037	10.2						
Local and pick-up freight, per mile	. 03975	.045	.00525	13. 2						
Work, construction, on wreck train, per mile	. 0363	.04	.0037	10. 2						
rate for groups 1, 2, and 3, day and night, per hour	. 37	.38	. 01	2.7						

		Flag	men.		Brakemen.				
Class of service.	Rate.		Increase.		Ra	ite.	Increase.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger, per mile Regularly assigned					\$0.015	\$0.016	\$0.001	6.7	
passenger trainmen, monthly guaranty, per 28 days Through and irregu-					64. 50	64. 50	.00	.0	
lar freight, per mile.	\$0.02525	\$0.0267	\$0.00145	5.7	.0242	.0267	.0025	10.3	
Local and pick-up freight, per mile Work, construction, on wreck train, per	.028	. 03	.002	7.1	. 027	.03	. 003	11.1	
mile	.02525	. 0267	. 00145	5.7	.0242	.0267	. 0025	10.3	
and 3, day and night, per hour					.34	.35	.01	2.9	

<sup>&</sup>lt;sup>1</sup> Includes snowplow service, 1910.

# Rates of pay of conductors and trainmen.

Class of service.	Conduct	tors.	Baggag	gemen.	Flag	men.	Brakemen.	
Class of service.	1910	1913	1910	1913	1910	1913	1910	1913
Passenger, per mile	\$0.0268	<b>\$0.</b> 029	\$0.0155	\$0.0165		\$0.016	\$0.015	\$0.016
anty, per 28 days	1 115.00	115.00	2 69.00	69.00		64. 50	<sup>3</sup> 64. 50	64.50
per mile	.0363	.04			\$0.02525	. 0267	.0242	. 0267
mile	. 03975	. 045			.028	.03	.027	. 03
train, per mile	.0363	.04			.02525	. 0267	.0242	.0267

Mileage allowance per day, 157.
 Mileage allowance per day, 177.

<sup>Mileage allowance per day, 170.
Includes snowplow service, 1910.</sup> 

Rates of pay of conductors and trainmen—Continued.

Character to	Conduc	tors.	Baggag	gemen.	Flag	men.	Brakemen.	
Class of service.	1910	1913	1910	1913	1910	1913	1910	1913
OVERTIME.								
Passenger, per hour	\$0.42	\$0.45	\$0.27	\$0.275		\$0.26	\$0.25	\$0.255
Freight: Through, per hour Local, per hour	. 363 . 3975	.40			\$0. 2525 . 28	. 267 . 30	.242	.267 .30
YARD SERVICE (10 HOURS).								
Group 1:			1					
Day, per hour Night, per hour Group 2:	.37 .39	.38					.34	.35
Day, per hour Night, per hour	.36 .38	.37					. 33	.34
Group 3: Day, per hour Night, per hour	.35	.36					.32	.33

Note.—Increases in 1913 over 1910 for services not specified are shown in Article E of the award, in terms of percentages.

## CHICAGO, INDIANAPOLIS & LOUISVILLE RAILWAY CO.

The application of the award of the arbitration board to this railway resulted in the usual increase of 8 per cent to passenger conductors and 10.2 per cent to conductors employed on through and irregular freight, work, construction, and wreck trains.

Passenger brakemen working on a monthly guaranty secured an advance of 9.3 per cent and those working on a mileage basis were allowed 6.7 per cent. Brakemen in freight service obtained an increase in rates of pay of 10.3 per cent as the result of the arbitration award.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	ictors.		Baggagemen.					
Class of service.	service. Rate.		Increase.		Ra	ite.	Increase.			
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.		
Passenger: Standard, per mile Regularly as- signed train- men; monthly guaranty	\$0. 0268 125. 00	\$0. 029 135. 00	\$0. 0022 10. 00	8. 2	<b>\$0.</b> 0155	\$0.0165	\$0.001	6.5		
Through or irregular freight, work, construction, wreck, or circustrain service, per mile 1	. 0363	. 04	. 0037	10. 2						
and 2, day and night, per hour	. 375	. 385	.01	2.7						

<sup>1</sup> Runs of 100 miles or less, either straightaway or turn-around, paid as 100 miles.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

	Flag	men or re	ear brakem	en.	Brakemen.					
Class of service.	Rate.		Iner	ease.	Ra	te.	Increase.			
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.		
Passenger: Standard, per mile. Regularly assigned trainmen; monthly guaranty. Through or irregular freight, work, construction, wreck, or circus train service, per mile! Yard service, average rate for groups 1 and 2, day and night, per hour	\$0. 015 70. 00	\$0. 016 78. 00	\$0.001 8.00	6. 7	\$0. 015 70. 00 . 0242 . 345	\$0. 016 76. 50 . 0267	\$0.001 6,50 0025	6. 7 9. 3 10. 3 2. 9		

<sup>1</sup> Runs of 100 miles or less, either straightaway or turn-around, paid as 100 miles.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages. Rates of pay of conductors and trainmen.

	co oj pag	0) 001100	actors are				
Class of service.	Rate (pe	er mile).	Runs of less than 155 miles, minimum rate (per day).	Regularly as- signed trainmen (monthly guar- antee).		Overtime (per hour).	
	1911	1913	1913	1911	1913	1911	1913
Passenger:     ( onductors .     Assistant conductors or collectors .     Baggagemen .     Flagmen or rear brakemen .     Brakemen .	tors or col- 					Cents. 42 25 24	Cents. 45 35. 7 27. 5 26 25. 5
				Rate (pe	er mile).	Local	reight.
				1911	1913	1911 (per day).	1913 (per mile).
Through or irregular freight, work train service: 1 Conductors Flagmen Brakemen			•	\$0.0363 .0242	\$0. 04 . 0267 . 0267	\$3. 975 2. 80 2. 70	\$0.045 .03 .03
				Group 1 (	per hour).	Group 2 (	per hour).
				1911	1913	1911	1913
Yard service: 2 Day conductors Day brakemen Night conductors Night brakemen	\$0.37 .34 .39 .36	\$0.38 .35 .40 .37	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36			

Runs of 100 miles or less, either straightaway or turn around, paid as 100 miles.
 In all yards 10 hours or less constitutes a day's work. Overtime paid pro rata, actual minutes counted.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

## CHICAGO, INDIANA & SOUTHERN RAILROAD CO.

The increase in rates of pay as the outcome of the arbitration award amounted, in the case of this road, to approximately 8 per cent for passenger conductors, 10 per cent for conductors on through freight, 13 per cent for conductors on way freight, and 2.6 to 2.7 per cent for yard conductors. Baggagemen employed on the basis of a monthly guaranty had their monthly rate increased 10 per cent, while those on a mileage basis secured an advance of 6.5 per cent. Brakemen in passenger service were allowed an increase in rates of pay ranging from 6.7 to 9.3 per cent. In through freight service the advances granted to brakemen were 10.3 per cent and in way freight 11.1 per cent. Yard brakemen received an advance of 1 cent an hour, or 2.9 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	ictors.			Bagga	gemen.		
Class of service.	Rate.		Increase.		Ra	te.	Increase.		
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.	
Passenger: Standard, per mile Regularly as- signed passen- ger trainmen,	\$0. 02 <sup>6</sup> 8	\$0.029	\$0.0022	8. 2	<b>\$</b> 0. 0155	\$0,0165	\$0.001	6.5	
monthly guar- anty Through freight,	125, 00	135.00	10.00	8.0	75.00	82, 50	7. 50	10.0	
standard, per mile Work or construction,	. 0363	1.04	. 0037	10. 2					
standard, per mile	2, 0384	.04	.0016	4. 2					
Way freight, stan- dard, per mile Yardmen, a verage rate, day and night:	. 03975	.045	. 00525	13. 2				-	
Kankakee yard, per hour Streator and	.38	.39	.01	2.6					
North Judson yard, per hour	. 37	.38	.01	2.7					

		Brake	emen.		Flagmen.					
Class of service.	Ra	te.	Incr	ease.	Ra	te.	Increase.			
	1911 1913 Amount.		Per cent	1911	1913	Amount.	Per cent.			
Passenger: Standard, per mile	\$0.015	<b>\$0.01</b> 6	\$0.001	6. 7						
Regularly as- signed passen- ger trainmen, monthly guar-										
antyThrough freight.	70.00	76. 50	6, 50	9.3						
standard, per mile Work or construction,	. 0242	. 0267	. 0025	10.3						
standard, per mile	<sup>2</sup> . 0254	. 0267	. 0013	5.1	<sup>2</sup> \$0.0254	\$0.0267	\$0.0013	5.1		
Way freight, stan- dard, per mile Yardmen, average rate, day and night:	. 027	. 03	. 003	11.1						
Kankakee yard, per hour Streator a n d	. 35	.36	.01	2.9						
North Judson yard, per hour	.34	. 35	.01	2.9						

Same rates apply to construction and work trains.
 Through freight rates with \$3.84 and \$2.54 as daily minimum.

Rates of pay of conductors and trainmen.

Class of service.		rd rates mile.	passeng	assigned for train- monthly ty.	Special rates be Streate South	etween or and	Hour time	ly overates			s p <b>er</b> d 1–1913.	
	1911	1913	1911	1913	1911	1913	1911	19	13			
Assis t a n t conductors. Baggagemen. Brakemen	Conductors.     \$0.0268     \$0.029     \$125.00     \$135.00     \$8.00       Assis t a n t conductors.     023 conductors.     023 conductors.     82.50     82.50     82.50								45 357 275 255 260	I		per
	Standa	rd rates	nile.	Hours per day, 1911-1913.								
						1911		1913				
Through freight: Conductors	•••••	• • • • • • • • • • • • • • • • • • • •	•••••		•••••	\$0.0363			4	10 l mil		10 e r
Baggagemen Brakemen Flagmen Work or construc						. 02	.0242		267 267	Do. Do. Do.		
Conductors Brakemen and Way freight:		n				2. 03 2. 02		.0	4 267		00.	
Conductors Brakemen						3, 03 3, 02		.0	)45 )3		00.	
	C	lass of se	rvice.	,			kee ya hour.	ard,	Jı	eator a udson our.		
						1911	19	13	1	911	191	3
Yardmen: Day conducto Day brakeme Night conduc Night braken	tors					\$0.3°	4	0.38 .35 .40 .37		\$0.36 .33 .38 .35	\$1	0. 37 . 34 . 39 . 36

Same rates apply to construction and work trains.
 Through freight rates with \$3.84 and \$2.54 as daily minimum.
 Per day or 100 miles.

### CINCINNATI, HAMILTON & DAYTON RAILWAY CO.

On the Cincinnati, Hamilton & Dayton Railway the increases in rates of pay in passenger and yard service approximated the general advance granted by the board of arbitration. In through and irregular freight and construction service the rates of pay to conductors and brakemen were slightly more than 10 per cent higher after the arbitration award than they were before. On specified runs advances in rates as a result of the arbitration were made to conductors, baggagemen, and trainmen, ranging from 4.8 to 10.3 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Conc	luctors.		Baggagemen.					
Class of service.	Ra	te.	Incr	ease.	Ra	ite.	Incr	ease.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Passenger, standard, per mile. Freight: Through and irregular	<b>\$0.</b> 0268	\$0.029	\$0.0022	8. 2	<b>\$0.0155</b>	<b>\$0.01</b> 65	\$0.0010	6.5		
and construction service, per mileLocal freight, per mileSpecified runs:	.0363	1.04 .045	.0037	10. 2 13. 2		•••••		*********		
Ironton and Wellston (mixed), per mile Dayton and Mandale	. 0363	.04	.0037	10.2	.025	.027	.002	8.0		
Junction (passenger), per mile Ohio River branch (pas-	. 025	.0275	.0025	10.0	.0145	. 0154	.0009	6.2		
senger), per mile Findlay branch (mixed)	.025	.0275	.0025	10.0	.0145	.0154	.0009	6.2		
per day Middletown branch	4. 15	4. 49	. 34	8. 2	2.80	2.98	.18	6.4		
(mixed), per day Bowling Green branch	4. 20	4. 50	.30	7.1						
(mixed), per month1	.05. 00	113. 61	8. 61	8. 2	70.00	74. 48	4.48	6.4		
		Bra	kemen.			Fla	agmen.			
Class of service.	Ra	ite.	Incre	ease.	Ra	ite.	Incr	ease.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Passenger, standard, per mile Freight:	1	\$0.016	\$0.001	6.7						
Through and irregular and construction service, per mile  Local freight, per mile  Specified runs:	.0242	1.0267 .03	.0025	10.3 11.1	\$0.0280	\$0.03	\$0.0020	7.1		
Ironton and Wellston (mixed), per mile Dayton and Mandale	.0242	.0267	.0025	10.3						
Junction (passenger), per mile	. 014	.0149	.0009	6.4						
Ohio River branch (passenger), per mile Findlay branch (mixed),	. 014	.0149	. 0009	6.4						
per day	. 2.70	2.83	.13	4.8						
(mixed), per day	2.55	2.81	.26	10.2						
(mixed), per day Bowling Green branch (mixed), per month Connersville helper, per	67.00	70. 28	3.28	4.9						
hour	22	.24	.02	9.1						
		For	remen.			Hel	pers.			
Class of service.	Ra	ate.	Incre	ease.	Ra	ste.	Incr	ease.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Freight:										
Freight: Average rate for groups 1 and 2, day and night, per hour	. \$0. 3775	<b>\$0.</b> 385	\$0.0075	2.0	<b>\$0.</b> 3475	<b>\$0.355</b>	\$0.0075	2.2		

<sup>&</sup>lt;sup>1</sup> Rates given for 1913 also apply to work, snowplow, circus, and wreck train service.

# Rates of pay of conductors and trainmen.

Class of service.		Stane	Standard rate per mile.				ns of chan niles; num per y.	Regular assigne passeng trainme month guarant	ed ger en; ly		time per
		19	910	1913		19:	13	1913		1910	1913
construction: Conductors. Flagmen. Brakemen. Local freight: Conductors. Flagmen. Brakemen. Passenger service: Conductors. Bagaagemen.	Conductors. Flagmen Brakemen Local freight: Conductors. Flagmen Brakemen					\$4, 50 2, 75 2, 55		\$135. 82	\$135.00 82.50 76.50		(1) (1) (2) \$0.45 5, .275 4, .255
Assistant conductors Flagmen or rear brakem	.016 .023 .016		2. 55 3. 57 2. 60 78. 00								
							Rat	es of pa	y pe	r bour.	4
						(	Group	1.		Grou	ıp <b>2.</b>
						1910	5	1913	1	1910	1913
Yard service: Day foremen Night foremen Day helper Night helper						\$0.375 \$0.38 .395 .40 .345 .35 .365 .37				\$0.36 .38 .33 .35	\$0.37 .39 .34 .36
	Condu	ctors.	Bagga	gemen.		Brake	emen.		0	vertim	e.
Specified runs.	1910	1913	1910	1913		1910	1913		1910	)	1913
(mixed), per mile.  Dayton and Mandale Junction (passenger), per mile.  Ohio River branch (passen-	\$0.0363 .025	\$0.04 .0275 .0275	\$0.025 .0145 .0145	\$0.027 .0154 .0154		. 0140	\$0.0267 .0149				
ger), per mile. Findlay branch (mixed), per day. Middletown branch	ger), per mile. Findlay branch (mixed), 4.15 per day. Middletown branch 4.20					2. 70	2. 83	After	12	hours.	Art. 1. Do.
(mixed), per day.  Bowling Green branch (mixed), per month.  Connersville helper, per hour.		4.50 113.61	70.00	2. 81 74. 48	67	. 00	70. 28	After		hours.	Do.

<sup>1</sup> Runs of 100 miles or less, either straightaway or turn-around, paid as 100 miles.
2 Rates given for 1913 also apply to work, snowplow, circus, and wreck-train service.
3 Mileage in excess of 100 miles paid for in addition pro rata.
4 10 hours or less constitute a day's work. Overtime computed on actual time worked or held for duty, pro rata.

<sup>&</sup>lt;sup>5</sup> Average rate.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

### CINCINNATI NORTHERN RAILROAD CO.

Conductors and brakemen in through freight service on this railroad secured advances of approximately 10 per cent in rates of pay per mile. In local freight service the increase in rates of pay per day as the result of the arbitration was as follows:

Class of employees.	Amount.	Per cent.
Conductors. Brakemen. Foremen.	Cents. 50 28 28	13. 3 11. 2 10. 8

In work or construction train service the conductors and brakemen received approximately a 10 per cent advance in rates of pay, and on wreck trains conductors were increased 10 per cent and brakemen 15.6 per cent on a mileage basis of payment.

The increases in yard rates per hour as the result of the arbitration were approximately 3 per cent. In passenger service conductors' rates of pay were 8.1 per cent higher after the award of the arbitration board and brakemen 6.9 per cent higher.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	Brakemen.				
Class of service.	Ra	te.	Incr	ease.	Rate.		
	1910-11	1914	Amount.	Per cent.	1910–11	1914	
Passenger service on runs not otherwise specified, per mile	3. 75 3. 65	\$0.0268 .0385 4.25 4.25 4.13 4.13 .0385 .0385	\$0.002 .0035 .50 .48 .48 .0035 .0035	8. 1 10. 0 13. 3 13. 3 13. 2 10. 0 10. 0 3. 0	2 \$0. 0145 . 0235 2. 50 2. 45 2. 45 . 0235 . 0224 4. 30	\$0. 0155 . 0259 2. 78 2. 78 2. 72 2. 72 . 0259 . 0259 5. 31	

	Brake	emen.	Foremen, .						
Class of service.	Iner	ease.	Ra	ite.	Increase.				
	Amount.	Per cent.	1910-11	1914	Amount.	Per cent.			
Passenger service on runs not otherwise specified, per mile. Freight: Through, per mile. Local between— Van Wert and Hudson, per day Van Wert and Lewisburg, per day. Lewisburg and Franklin, per day? Jackson and Hudson, per day? Work or construction, per mile Yard average, day and night, per hour	\$0.0010 .0024 .28 .28 .27 .27 .0024 .0035 .01	6. 9 10. 2 11. 2 11. 0 11. 0 10. 2 15. 6 3. 3	\$2. 60 2. 60 2. 55 2. 55	\$2. 88 2. 88 2. 82 2. 82	\$0. 28 . 28 . 27 . 27	10.8 10.8 10.6 10.6			

With the following exceptions in 1910: (a) Clarks Lake run, 3 round trips daily between Hudson and Jackson, \$120 per month; (b) Celina and Paulding run, \$85 per month.

With the following exceptions in 1910: (a) Clarks Lake run, 3 round trips between Hudson and Jackson daily, \$75 per month; (b) Celina and Paulding run, \$60 per month.

<sup>41910.</sup> 5 1913.

Rates of pay of conductors and trainmen.

Class of service or run.			Baggage- men.	Flag- men or rear brake- men.	Brake	men.	Foremen.	
	1910-11	1914	1910–11	1914	1910-11	1914	1910–11	1914
PASSENGER.  Service or runs not otherwise specified: Per mile. Per month	1 \$0, 0248	<b>\$</b> 0. 0268	<sup>2</sup> \$42. 50	<b>\$0.</b> 0155	2 \$0. 0145	<b>\$0.</b> 0155		
Runs of less than 155 miles (1914), minimum rates, per day Regularly assigned passenger trainmen, monthly guaranty		4.15 124.50		2, 51	****	2. 46 73. 80		
FREIGHT.	.035	.0385			. 0235	. 0259		
Through, per mile Local:  Between Van Wert and Hudson, per day  Between Van Wert and Lewisburg,	3.75	4. 25		.0209	2. 50	2.78	\$2, 60	\$2.88
per day	3.75	4. 25			. 2, 50	2.78	2.60	2. 88
burg and Frank- lin, <sup>3</sup> per day Between Jackson	3. 65	4.13			2. 45	2.72	2. 55	2. 82
and Hudson,3 per day Work or construction,	3.65	4.13			2, 45	2.72	2, 55	2. 82
per mile	. 035	.0385			. 0235	. 0259		
Per mile	4, 0335 4, 335	. 0385			4. 0224 4. 224	. 0259		
Standard passenger, per hour.	. 35	.38	. 21		. 20	. 21		

·	Rate pe	r hour.
Class of employees.		
	1910	1913
YARD SERVICE.		
Day conductor Day brakemen	\$0.32	<b>\$0.33</b>
Night conductor.	.34	.30

1 With the following exceptions in 1910: (a) Clarks Lake run, three round trips daily between Hudson and Jackson, \$120 per month, no overtime; (b) Celina and Paulding run, \$85 per month.

2 With the following exceptions in 1910: (a) Clarks Lake run, three round trips between Hudson and Jackson daily, \$75 per month; (b) Celina and Paulding run, \$60 per month. Round trip

# CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS RAILWAY CO.

Rates paid to passenger conductors in all branches of passenger service on this road were increased approximately 8 per cent by the award of the arbitration board. On through freight trains the advance in rates of pay to conductors was 10.2 per cent; and in local freight service, 13.2 per cent.

On a mileage basis baggagemen had their rates of pay advanced 6.5 per cent, and on the basis of a monthly guaranty they secured

an increase of \$7.50 a month, or 10 per cent.

<sup>1910</sup> schedule: Mileage rates to and from wreck, hourly rates for time at wreck.

Note. - Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

Passenger brakemen working on a monthly guaranty were advanced \$6.50, or 9.3 per cent, while those on a mileage basis had their rates increased 6.7 per cent. On through freight, work, construction, and wreck trains brakemen had their rates of pay increased 10.3 per cent, and on local freight 11.1 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	ictors.		Baggagemen.					
Class of service.	Ra	te.	Incr	ease.	Ra	ite.	Incr	ease.		
-	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.		
Passenger: Runs not otherwise	\$0.0268	1 \$0. 029	\$0.0022	8.2	\$0.0155	80 0165	\$0.0010	6.5		
specified, per mile Regularly assigned trainmen, monthly	125. 00	135. 00	10.00		75. 00	82. 50	7. 50			
guaranty Through freight, work, construction,wreck and circus train service, per	125.00	155.00	10.00	0.0	10.00	02. 00	7. 50	10.0		
mile <sup>2</sup>	. 0363 3. 975	. 04 4. 50	. 0037	10. 2 13. 2						
groups 1 and 2, day and night, per hour	. 375	. 385	. 01	2.7				•••••		
Sharon - Cincinnati and Middletown- Cincinnati, per day.	4.20	4. 50	.30	7.1	2. 75	2.75	.00	0.0		
Mount Gilead Short Line, per month Aurora - Cincinnati lines, Nos. 232-233,	100.00	108.00	8.00	8.0				:		
per month	100.00	108.00	8.00	8.0						
including switching at North Bend, per	4, 20	4. 50	.30	7.1	2.75	2.75	.00	0.0		
Runs between Law- renceburg Junction										
Lawrenceburg and Aurora, per month.	110.00	118.80	8. 80	8.0						
Columbus, Indianapolis, and Greensburg runs (brakemen handle bag-										
gage), per month Alton Flyer (brakemen handle bag-	100.00	108.00	8.00	8.0						
gage), per month Alton plug run, per	3 110. 00	118.80	8. 80	8.0						
month Urbana-Peoria ac- commodation, per	100.00	108.00	8, 00	8.0						
month	115.00	124. 20	9. 20	8.0						
Findlay branch, per month F. F. & M. branch,	100.00	110.10	10.10	10.1						
per month Vincennes branch,	110.00	121.10	11.10	10.1						
cennes and St. Francesville, per month Mount Carmel-Vin-	100.00	110.10	10.10	10.1						
cennes run, per	105.00	115. 60	10.60	10.1						

<sup>&</sup>lt;sup>1</sup> These rates to obtain whenever the miles made at these rates in a day amount to a greater sum than the minimum day rates of \$4.50 for conductors, \$2.75 for baggagemen, and \$2.55 for brakemen, awarded in passenger service.

2 Runs of 100 miles or less either straightaway or turn around, paid as 100 miles.

3 Two round trips per day between Alton and East St. Louis.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

1		Brak	emen.			Fo	remen.	
Class of service.	Ra	te.	Incr	ease.	Ra	ite.	Incr	ease.
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.
Passenger: Runs not otherwise specified, per mile. Regularly assigned trainmen, monthly	\$0.015	\$0.016	\$0.001	6.7		, , , , ,		
guaranty Through freight, work, construction,wreck and	70.00	76. 50	6. 50	9.3				
circus train service, per mile¹	2.70	. 0267 3. 00	. 0025	10.3 11.1	\$2.80	\$3.00	\$0.20	7.1
groups 1 and 2, day and night, per hour Passenger, specified runs: Sharon - Cincinnati and Middletown-	. 345	. 355	. 01	2.9				
Cincinnati, per day. Aurora - Cincinnati	2. 55	2.60	. 05	2.0	•••••			
lines, Nos. 232-233, per month	60.00	65. 57	5. 57	9. 3				•••••
including switching at North Bend, per day	2. 55	2.60	.05	2.0				
Lawrenceburg and Aurora, per month. Columbus, Indianap- olis and Greensburg runs (brakemen handle baggage),	70.00	76.50	6.50	9.3				• • • • • • • • • • • • • • • • • • • •
per month	60.00	66.86	6.86	11.4				
gage), per month Urbana-Peoria ac- commodation, per	65.00	72.42	7.42	11.4				
month	65.00	72.42	7.42	11.4				
Findlay branch, per month	63.00	69. 50	6.50	10.3				
per month	70.00	77. 20	7.20	10.3				
Francesville, per month  Mount Carmel-Vincennes run, per	60.00	66.18	6.18	10.3				
month	63, 00	69. 50	6.50	10.3				

<sup>&</sup>lt;sup>1</sup> Runs of 100 miles or less, either straightaway or turn around, paid as 100 miles.

# Rates of pay of conductors and trainmen.

Class of employees.		Runs not other- wisespecified (per mile).			Ove	ertin hou	ne (per ir).		trainn	ly assigned nen, month- ranty.
	1911	1913	1913	3	1911	L	1913		1911	1913
Passenger: Conductors Baggagemen. Brakemen. Through freight, work, construction, wreck, and circus train: 2	\$0. 0268 . 0155 . 0150	1 \$0. 02 1 . 01 1 0. 16	65 2.	50 75 55		25 24	. 2	75 55	\$125, 00 75, 00 70, 00	82, 50 76, 50
Conductors Brakemen Flagmen	.0363	.04 .02 .02	67			!				
Local freight; \$ Conductors Brakemen Foremen	4 3. 975 4 2. 70 4 2. 80	4 4.50 4 3.00 4 3.00								
Class of a	Class of employees,					o 1 (p	per hou	r).	Group 2	(per hour).
Class of 0	mpioyees.		٠		1911	1	1913	3	1911	1913
Yardmen: Day conductors Day brakemen. Night conductors. Night brakemen						. 37 . 34 . 39 . 36		38 35 40 37	\$0.36 .33 .38	34 .39
	C	onduct	ors.		Baggag	geme	en.		Brake	emen.
Class of service.	191	1	1913	]	1911	1	913		1911	1913
Passenger service, specified runs Sharon-Cincinnati and Midd town-Cincinnati runs Mount Gilead short line Aurora-Cincinnati lines No 232, 233 Aurora-Cincinnati runs No 231-230, including switchir at North Bend.	p.d. <sup>5</sup> \$ p.m. <sup>7</sup> 10 s. p.m. <sup>7</sup> 10 s. p.m. <sup>7</sup> 10	0.00 p.	.d.6 \$4.50 .m.6108.00 m.6108.00					p.n		p.d. <sup>6</sup> \$2.60 p.m. <sup>6</sup> 65.57 p.d. <sup>7</sup> 2.60
Runs between Lawrencebur Junction and Aurora, it cluding switching at Law renceburg and Aurora	rg n- v-		m 9118 80	p.u	2.10	p.u.	. 2. 10			p.d. 2.00

p.m.970.00

p.m.760.00

p.m.765.00

p.m. 665.00

p.m.1076.50

p.m.6 66.86

p.m.672.42

p.m.672.42

<sup>2</sup> Runs of 100 miles or less, either straightaway or turn around, paid as 100 miles. <sup>3</sup> 100 miles or less, 10 hours or less, constitute a day's work.

p.m.<sup>7</sup>100.00 p.m.<sup>6</sup>108.00

renceburg and Aurora p.m.9110.00 p.m.9118.80 Columbus, Ind., and Greensburg runs (brakemen handle

4 Per day

<sup>5</sup> Overtime after 14 hours

6 Overtime as per article C.

baggage) Alton Flyer, brakemen (handle

p.m.<sup>11</sup>110.00 p.m.<sup>6</sup>118.80 baggage) p.m.,<sup>11</sup>110.00 p.m.<sup>6</sup>118.80 Alton plug run p.m.,<sup>12</sup>100.00 p.m.<sup>6</sup>108.00 Urbana-Peoria accommodation p.m.<sup>6</sup>115.00 p.m.<sup>6</sup>124.20

7 No overtime.
8 Overtime after 13 hours and 30 minutes.
9 Extra pay for construction work at hourly rate. No overtime.
10 Extra pay for construction work at hourly rate. Overtime as per article C of award.

12 Two round trips per day between Alton and East St. Louis.
12 Overtime after 12 hours except on Sunday. No overtime allowance.
13 Brakemen are included with Alton yardmen and paid as such.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

<sup>&</sup>lt;sup>1</sup> These rates obtain whenever the miles made at these rates in a day amount to a greater sum than the minimum day rates of \$4.50 for conductors, \$2.75 for baggagemen, and \$2.55 for brakemen, awarded in passenger service.

Rates of pay of conductors and trainmen—Continued.

Characteristics	Condu	ictors.	Brake	men.	Train baggagemen.		
Class of service.	1911	1913	1911	1913	1911	1913	
Through freight, specified runs: Findlay branch, per month	1 \$100.00	<b>3</b> \$110. 10	1 \$63.00	<sup>2</sup> \$69.50			
F. F. & M. branch, per month	<b>8 110. 00</b>	<sup>2</sup> 121. 10	<sup>8</sup> 70.00	2 77. 20		<b></b>	
St. Francesville, per month	4 100.00	² 110. 10	4 60.00	4 66. 18			
run, per month  Traveling over the road on	4 105.00	<sup>2</sup> 115. 60	4 63.00	4 69. 50			
company business, per mile.	. 03	. 033	. 021	. 023	£0.021	\$0.023	

1 Overtime after 14 hours and 30 minutes.

8 Overtime after 13 hours. 4 Overtime after 11 hours.

#### DELAWARE & HUDSON CO.

On the Delaware & Hudson Railroad, as can be seen from the following table, the increase of rates of pay to passenger and freight conductors as the result of the application of the arbitration award ranged, according to the basis of payment, from 7.1 to 10.2 per cent. The advances to baggagemen were only 3.8 per cent in branch-line service, 6.5 per cent on standard runs, and 10 per cent in the case of minimum monthly guaranties. Passenger flagmen or rear trainmen on a standard basis obtained an increase of slightly less than 5 per cent, but in milk-train service the percentage of increase was 10.4, and for minimum monthly guaranties 7.6 per cent. Freight flagmen's rates of pay were 5.7 per cent higher as the result of the arbitration. Regular passenger brakemen received a somewhat larger advance for a standard day and for minimum monthly guaranties. Freight brakemen, with the exception of those on branch lines, were granted increases of slightly more than 10 per cent. Ticket collectors were advanced 82 cents a day, or 29.8 per cent. The increases allowed in the yard service were comparatively small, ranging from a percentage of 2.7 to 2.9.

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<sup>2</sup> Overtime as per article 1 of award at through freight rates.

-													
			Co	nduct	tors.				Bagg	ageme	n.		
Class of service.		R	ate.		Incre	ase.		Ra	ite.		Increa	se.	
		1910	19:	13 A	mount.	Per cent.	19	010	1913	Amo	unt.	Per cent.	
Passenger: Standard (155 miles or ov per mile	an th.	\$0.0268 4.20 125.00	\$0.0 4.8 135.0 5.1	50	\$0.0022 .30 10.00 .47	8. 7. 8.	$\begin{bmatrix} 2.7 \\ 75.6 \end{bmatrix}$	75	\$0, 0165 2, 75 82, 50		. 001	6. 5 0. 0 10. 0	
Milk service, per day Branch runs, per day Through or irregular freigl per mile Work, construction, and wrec per mile	nt,	4. 69 4. 05 . 0363	4.3		.0037	10. 8. 10.	$\begin{bmatrix} 2, 6 \\ 2 \end{bmatrix}$	35	2.75		. 10	3.8	
P						1	1						
	-		Rea	r train	nmen.		_		Bra	kemer	1.		
Class of service.		R	ate.		Incre	ease.		Ra	ite.	]	Increa	se.	
		1910	19	13 A	mount.	Per cent	19	910	1913	Amo	unt.	Per cent.	
Passenger: Standard (155 miles or over) per mile		\$0. 01525 2. 585 72. 50 2. 70	\$0.0 - 2.0 78.0 2.9	60	. 015 5. 50 . 28	4. 0. 7. 10.	$\begin{bmatrix} 6 & 2.5 \\ 6 & 70.6 \\ 4 & 2.7 \end{bmatrix}$	55 )0 . 70	\$0.016 2.55 76.50 2.98	6.	00	6. 7 0. 0 9. 3 10. 4	
Branch runs, per day Through or irregular freigl per mile Work, construction, and wre per mile	ht,	• • • • • • • •						50 0242 0242	2. 55 . 0267 . 0267		05 0025 0025	2. 0 10. 3 10. 3	
		Flagmen.					Messengers.						
Class of service.	-	R	ate.		Increase.			Rate.			Increase.		
	-	1910	19	13 A	mount.	Per	. 19	910	1913	Amo	unt.	Per cent.	
Passenger: Milk service, I day. Through or irregular freigi per mile. Work, construction, and wre per mile.	ht,	\$0. 02525		267 <b>\$</b>	\$0, 00145 . 00145	5.	7	2. 85	\$3.14	\$1	0, 29	10. 2	
	7	Ticket c	ollecto	rs.		Foren	nen.			Hel	pers.		
	R	ate.	Inci	ease.	Ra	te.	Incre	ease.	Ra	ite.	Inc	rease.	
Class of service.	0161	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	. 0161	1913	Amount.	Per cent.	
Passenger: Standard (155 miles or over), per day Yard: Average rate for groups 1, 2, and 3, day and night, per hour			\$0.82	29.8			\$0.01	2.7		<b>\$</b> 0.35	\$0.01	2.9	

Class of employees.	Standard mile (1 or over	rate per 155 miles ).	Minimum day (l 155 mile	ess than	Minimun	n rate per nth.	Overtime rate, per hour.	
	1910	1913	1910	1913	1910	1913	1910	1913
Passenger: Conductors Baggagemen Rear trainmen Brakemen Ticket collectors Through or irregular	. 0155 . 01525 . 015	\$0.029 .0165 .016 .016 3.57	\$4.20 2.75 2.585 2.55	\$4.50 2.75 2.60 2.55	\$125.00 75.00 72.50 70.00	\$135.00 82.50 78.00 76.50	\$0. 42 . 25 . 24 . 24	\$0. 45 . 275 . 26 . 255
freight: Conductors Flagmen Brakemen Local freight:	. 02525	. 04 . 0267 . 0267						
Conductors	1 2. 80 1 2. 70	. 045 . 03 . 03						
Conductors Flagmen Brakemen	. 02525	. 04 . 0267 . 0267						

Class of employees.	Branch da		Milk ser da	vice per	Regularly assigned passenger trainmen, monthly guaranty.		
	1910	1913	1910	1913	1910	1913	
Passenger: Conductors. Baggagemen Rear trainmen Brakemen Messengers.	\$4.05 2.65 2.50	\$4.38 2.75 2.60 2.55	\$4.69 2.70 2.70 2.85	\$5.16 2.98 2.98 3.14		\$131.40 82.50 78.00 76.50	

		Rates per hour.										
Yard ser	Yard service.	Grou	p 1.	Grou	ıp 2.	Group 3.						
	1910	1913	1910	1913	1910	1913						
Night foreme	enn.enn.en	\$0.37 .34 .39 .36	\$0.38 .35 .40 .37	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	\$0.35 .32 .37 .34	\$0.36 .33 .38 .35					

<sup>&</sup>lt;sup>1</sup> Per day or 100 miles.

### DELAWARE, LACKAWANNA & WESTERN RAILROAD CO.

In the case of a standard day of 155 miles, and for monthly guaranties, the passenger conductors on this road received an advance of about 8 per cent after the application of the award of the arbitration board, while in through-freight, construction, work, and milk-train service the increase allowed was about 10 per cent. Conductors on local freight trains were advanced 13 per cent. Passenger brakemen were advanced 6.7 to 9.3 per cent; freight brakemen from 10.3 to 11.1 per cent. Baggagemen on passenger received higher rates, ranging from 6.5 to 10 per cent. Rear trainmen in standard passenger service

were advanced 4.9 per cent, and in through-freight, construction, and work-train service 5.7 per cent. In the case of monthly guaranties in passenger service, milk-train, and in local freight service somewhat greater advances were received by flagmen. In yard service in Hoboken the increases secured by foremen and helpers ranged from 2.6 to 2.9 per cent; in Paterson, from 5.6 to 6.1 per cent.

	Cond	luctors.		Assistant conductors.					
Ra	ate.	Incr	easé.	Ra	ite.	Increase.			
1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
\$0,0268	\$0.029	\$0.0022	8. 2	\$0.0215	\$0.023	\$0.0015	7.0		
4. 20	4.50	.30	7.1	3. 35	3. 57	. 22	6.6		
125.00	135, 00	10.00	8.0						
1									
. 0363	.04	.0037	10. 2						
3.975	4.50	. 525	13. 2						
. 021	. 0231	.0021	10.0						
. 0155	. 0165	.001	6.5						
	\$0.0268 4.20 125.00 .0363 3.975	Rate.  1910 1913  \$0.0268 \$0.029 4.20 4.50 125.00 135.00	1910 1913 Amount.  \$0.0268 \$0.029 \$0.0022 4.20 4.50 .30   125.00 135.00 10.00    .0363 .04 .0037   3.975 4.50 .525   .021 .0231 .0021	Rate.         Increase.           1910         1913         Amount.         Per cent.           \$0.0268         \$0.029         \$0.0022         8.2           4.20         4.50         .30         7.1           125.00         135.00         10.00         8.0           .0363         .04         .0037         10.2           3.975         4.50         .525         13.2           .021         .0231         .0021         10.0	Rate.         Increase.         Rate.           1910         1913         Amount.         Per cent.         1910           \$0.0268         \$0.029         \$0.0022         8.2         \$0.0215           4.20         4.50         .30         7.1         3.35           125.00         135.00         10.00         8.0            .0363         .04         .0037         10.2            3.975         4.50         .525         13.2            .021         .0231         .0021         10.0	Rate.         Increase.         Rate.           1910         1913         Amount.         Per cent.         1910         1913           \$0.0268         \$0.029         \$0.0022         8.2         \$0.0215         \$0.023           4.20         4.50         .30         7.1         3.35         3.57           125.00         135.00         10.00         8.0             .0363         .04         .0037         10.2            3.975         4.50         .525         13.2            .021         .0231         .0021         10.0	Rate.         Increase.         Rate.         Increase.           1910         1913         Amount.         Per cent.         1910         1913         Amount.           \$0.0268         \$0.029         \$0.0022         8.2         \$0.0215         \$0.023         \$0.0015           4.20         4.50         .30         7.1         3.35         3.57         .22           125.00         135.00         10.00         8.0               .0363         .04         .0037         10.2               .021         .0231         .0021         10.0		

		1		J	1	1	1			
,		Bagg	gagemen.		Rear trainmen (flagmen).					
Class of service.	Ra	Rate.		ease.	Ra	ite.	Increase.			
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Passenger: Standard, per mile 1 Minimum allowance, per day 2.	\$0. 0155 2. 75	\$0. 0165 2. 75	\$0.001	6.5	<b>\$</b> 0. 01525	\$0.016	<b>\$</b> 0. 00075	4.9		
Regularly assigned trainmen, monthly guaranty.  Freight: Through freight; work,	75. 00	82. 50	7, 50		<b>72.</b> 50	78. 00	5. 50	7.6		
construction, and wreck train service, per mile 34. Local freight; pick-up or drop, mine, and roust-					. 02525	. 0267	. 00145	5.7		
about service, per day Milk service: Main-line service, train-				-	2. 80	3. 00	. 20	7.1		
men only, per month					75. 00	82. 50	7.50	10.0		

<sup>1</sup> Runs of 155 miles or over (1913).
2 Runs of less than 155 miles (1913).
3 Including filling and ballast service (1910).
4 Including snowplow and circus-train service (1913).
5 Same rates apply between Binghamton and Utica and Binghamton and Syracuse.
51 day off in 5 for trainmen.

		Bra	kemen.			Tra	ainmen.	
Class of service.	Ra	ate.	Incr	ease.	Ra	ite.	Increase.	
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile 1	<b>\$</b> 0. 015	<b>\$</b> 0. 016	\$0.001	6.7				
Minimum allowance, per day <sup>2</sup>	2, 55	2, 55	.00	.0				
anty	70, 00	76, 50	6. 50	9.3				,
construction, and wreck-train service, per mile 3 4. Local freight; pick-up or drop, mine and rousta-	.0242	.0267	. 0025	10.3	•••••			
bout service, per day  Milk service:  Binghamton and Richfield Springs, per month Main-line service, train-	2. 70	3.00	.30		\$75.00	\$82.75	<b>\$7.</b> 75	10.3
men only, per day					2, 75	2. 75	.00	.0
	,	Fo	remen.			Н	elpers.	
Class of service.	Ra	ite.	Incr	ease.	Ra	ite.	Incr	ease.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Yard service: Average, day and night— Hoboken, Secausus, and Newark, per hour Paterson, per hour	<b>\$0.38</b>	\$0.39 .38	\$0. 01 . 02	2. 6 5. 6	<b>\$</b> 0.35	<b>\$</b> 0. 36	\$0.01 .02	2.9 6,1

-													
Class of employe	• <b>6</b> S.	Standard				m allow- per day.		Regular trai month anty.	n m	en,	077	ertir	ne.
_		1910	1913 1	1910	)	1913 2		1910	1	913	1910	)	1913
Passenger service: Conductors Assistant	con-	\$0.0268	\$0.029	\$4.	20	\$4. 5	60	\$125.00	\$1	35. 00	\$0.	42	\$0. 45
ductors Baggagemen		. 0155	. 023 . 0165		35 75	3. 5 2. 7		100. 00 75. 00		82. 50		33 25	.357 .275
Rear trainmen men) Brakemen			. 016	3		2. 6 2. 5		72, 50 70, 00		78. 00 76. 50	:	24	. 26 . 255
Class of employe	ės.	tion, ar	freight, construc- id wreck rvice, per	up o and	r dr ro	ght, pick rop, mine oustabout , per day.	ť	Overtim			time.		
		1910 3	1913 4	1910		1913							
Freight service: Conductors Flagmen Brakemen		\$0.0363 .02525 .0242	\$0.04 .0267 .0267	2. 8	\$3, 975 2, 80 2, 70			paid fo on rur paid in to con	r time as of a exce aplete	over ess of the	iles or le xcess of 1 100 mil f the tim trip at an hour	0 ho es c ie n an	overtime ecessary
Class of employees.	В	inghamton Spi	and Rich				ervi		ımen	to	ngham- n and	bu	rouds-
erass or omprovous.		1910 5	191	3 5		1910				bur	rouds- g, 1913.		boken, 1913.
Milk service: Conductors Trainmen		021 per mile	_	ermile.		0.0155 <b>m</b> il		\$0.0165 \$2.75per		n	231 per nile. .75 per	1	0231 per nile. 016 per
Flagmen	ĺ		montl \$82.75 montl	n. per	\$7	-		\$82.50 month	per	\$82	nonth. 75 per nonth.	\$0.	nile. 016 per nile.
	Cl	ass of empl	OVARS				Ho	boken, S and Ne			Pat	ters	on.
	CI	and of ourpr	J 003.					1910	191	3	1910		1913
Yard service: Day foremen. Day helper. Night foremen Night helpers.	 							\$0.37 .34 .39 .36		. 38 . 35 . 40 . 37	\$0.35 .32 .37	2	\$0.37 .34 .39 .36

<sup>1</sup> Runs of 155 miles or over.
2 Runs of less than 155 miles.
3 Including ballast and filling service.
4 Including snowplow and circus train service.
5 Same rates apply between Binghamton and Utica; Binghamton and Syracuse. One day off in five for resignmen.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

#### DAYTON & UNION RAILROAD CO.

The comparison of rates of pay for conductors and trainmen before and after the arbitration in the case of the Dayton & Union Railroad is shown by weighted averages per day of 100 miles. By referring to the following table it will be seen that the per cent of increases in rates of pay on this basis as the result of the arbitration was, by classes of service and occupations, as follows:

	Class of	service.
Class of employees.	Passenger increase.	Freight increase.
Conductors. Baggagemen Brakemen	Per cent. 41.5 65.0 24.0	Per cent. 18.4

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

ď	Conductors.				Baggagemen.				Brakemen.			
Class of service.		te per niles.			se. 100 m		e per niles. Increa		i Rate per 100 miles.		Incre	ase.
2-255 5- 5-6-1-1-1-1	Before.	After.	Amount.	Per cent.	Before.	After.	Amount.	Per cent.	Before.	After.	Amount.	Per cent.
Passenger, average 1 Freight, average 1	\$2.05 3.80	\$2.90 4.50	\$0. 85 . 70	41. 5 18. 4	\$1.00	\$1.65	\$0.65	65.0	\$2.00 2.75	<sup>2</sup> \$2.48 3.00	\$0.48 .25	24.0 9.1

<sup>1</sup> Weighted.

Rates of pay of conductors and trainmen before and after the award of the board of arbitration, effective Nov. 10, 1913.

	Condi	ictors.	Bagga	gemen.	Brakemen.		
Class of service.	Before.	After.	Before.	After.	Before.	After.	
Passenger: Highest, per 100 miles. Lowest, per 100 miles	\$2.16 1.83	\$2.90	\$1.00	\$1.65	\$2,00	1 \$2.48	
Average (weighted)	2.05	2, 90	1.00	1.65	2.00	1 2. 48	
Freight: Highest, per 100 miles. Lowest, per 100 miles.	3.80	4.50			{ 2.80 2.70	} 2 3,00	
Average (weighted)	3. 80	4.50			2. 75	3.00	

<sup>1</sup> Minimum day's pay for 155 miles or less, at \$1.60 per 100 miles.

### DETROIT, TOLEDO & IRONTON RAILWAY CO.

On the basis of a standard day's pay of 155 miles, passenger conductors on this road as the result of the arbitration received an increase in pay of 8.2 per cent; baggagemen 6.5 per cent; and brakemen 6.7 per cent. Monthly guaranties to passenger conductors were advanced 8 per cent; to baggagemen 10 per cent; and to

<sup>&</sup>lt;sup>2</sup> Minimum day's pay for 155 miles or less, at \$1.60 per 100 miles.

<sup>&</sup>lt;sup>2</sup> Local.

brakemen 9.3 per cent. In through or irregular freight, work, construction, and wreck train service the following increases were made per mile: Conductors, 10.2 per cent: brakemen, 10.3 per cent.

per mile: Conductors, 10.2 per cent; brakemen, 10.3 per cent.

Conductors on local freight trains had their rates of pay per day increased slightly more than 13 per cent, and brakemen slightly more than 11 per cent. In yard service the increases per day to foremen and helpers were 2.7 and 2.8 per cent, respectively. On certain special runs on Kingman branch and Ironton Hill the advances to conductors and brakemen ranged from 9.3 to 13.1 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

Class of service.   Rate.   Increase.   Rate.   Increase.			Con	ductors.		Baggagemen.					
Passenger: Rate per mile for passenger services not otherwise specified (runs of 155 miles or over, 1913). Minimum allowance, per day 1	Class of service.	Ra	ite.	In	crease.	R	ate.	Incr	rease.		
Rate per mile for passenger services not otherwise specified (runs of 155 miles or over, 1913). Minimum allowance, per day 1		1911	1913	Amoun	t. Per cent.	1911	1913	Amount.	Per cent.		
	Rate per mile for passenger services not otherwise specified (runs of 155 miles or over, 1913). Minimum allowance, per day 1	4. 20 125. 00 . 0363 3. 975 3. 75	4.50 135.00 2.04 24.50 4.24	.30 10.00 .003 .525	7.1 8.0 7 10.2 13.2 13.1	2. 65	2.75	.10			

		1										
		Braken	ien.			Fore	men.			Hel	pers.	
Class of service.	Ra	te.	Incr	ease.	Ra	ite.	Incr	ease.	Ra	ite.	Incr	ease.
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.
Passenger: Rate per mile for passenger serv- ices not otherwise specified (runs of												
155 miles or over, 1913)	\$0.015	\$0.016	\$0.001	6.7								
guaranty Through and irregular freight, work construction, circus, and	70.00	76.50	6.50	9.3								
wreck train, per mile. Local freight, per day. Yard, average rate for groups 1 and 2, day	. 0242 2. 70	<sup>2</sup> .0267 <sup>2</sup> 3.00	. 0025		\$2.80	2 \$3.00	\$0. 20	7. 1				
and night, per hour Special runs:					.375	. 385	.01	2.7	\$0. 355	\$0.365	\$0.01	2.8
Kingman branch, per day Ironton Hill, per	2.65	2.94	. 29	10.9								
day	2. 65	2, 95	.30	11.3								

<sup>&</sup>lt;sup>1</sup> Short passenger, special or incidental service, 1911; runs of less than 155 miles per day, 1913. 
<sup>2</sup> Runs of 100 miles or less either straightway or turn around to be paid for as 100 miles.

Note.—Increases in 1913 over 1910 for service not specified are shown in article E of the award in terms of percentages.

Class of employees.	passeng	mile for ter serv- otherwise d.		Runs of less than 155 miles per day.	passer	ly assigne nger train monthl nty.	n- Orrentim	e, per hour	
	1911	1913	1911	1913	1911	1913	1911	1913	
Passenger service: Conductors Assistant conductors. Baggagemen Brakemen Flagmen and rear brakemen.	\$0.0268 .0155 .015	\$0.029 .023 .0165 .016	\$4. 20 2. 65 2. 61	\$4.50 3.75 2.75 2.55 2.60	\$125.00 75.00 70.00	82. 76.	50 . 25 50 . 24	. 357	
Clas	lar cons and	gh and freight, truction, wreck ice, per	work, circus, train	Local freigh	t, per day.				
•				1911	1 1	913 2	1911 1	1913 2	
Freight service: Conductors Foremen Brakemen					0363	\$0.04 .0267 .0267	\$3. 975 2. 80 2. 70	\$4.50 3.00 3.00	
				Grou	Group 1 (Delray). Group 2 (others				
Clas	s of emplo	yees.		1911		1913	1911	1913	
Yard service: 3 Day foremen Day helpers Night foremen Night helpers		0. 37 . 34 . 39 . 36	\$0.38 .35 .40 .37	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36				
Class of em	Branch.	Iront	on Hill.	Sumr	mit Hill.				
	1911					1913	1911	1913	
Special runs: Conductors, per da Brakemen, per da	\$4. 24 2. 94	\$3.75 2.65			\$3.86 2.86				

hour.

\* In all yards 10 hours or less constitute a day's work. Overtime computed for each employee on the basis of actual overtime worked or held for duty pro rata.

 $<sup>^1</sup>$  Mileage in excess of 100 miles paid for in addition pro rata.  $^2$  Runs of 100 miles or less, either straightaway or turn around, paid for as 100 miles. Rate, 10 miles per

Note.—Increases in 1913 over 1910 for services not specified are shown in article  ${\bf E}$  of the award in terms of percentages.

# GRAND RAPIDS & INDIANA RAILWAY CO., SOUTHERN DIVISION.

As a result of the arbitration award, passenger conductors on the southern division of the Grand Rapids & Indiana Railway received advances in rates of pay of slightly more than 8 per cent. Baggagemen were advanced from 5.8 to 10 per cent, according to character of service, and passenger brakemen received increases in rates ranging from 6.3 to 11.4 per cent. No advances in rates of pay to work-train and snowplow crews came about as the result of the arbitration. The increases in the yard service ranged from 3.8 per cent to conductors to 4.2 per cent to brakemen.

		Condu	ctors.		Baggagemen.				
Class of service.	Ra	ite.	Incre	ase.	Ra	Rate.		ase.	
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger: Fort Wayne-Grand Rapids,									
s. t., per day	\$4.60	\$4.60	\$0.00	0.0	\$2.60	\$2.75	\$0.15	5. 8	
Fort Wayne-Wolcottville, r. t., per day.	3. 33	3. 60	.27	8. 1	2.17	2.31	.14	6.	
Regularly assigned trainmen, per month	125.00	135. 00	10.00	8. 0	75. 00	82. 50	7. 50	10.	
imum, per month	100.00	108. 20	8.20	8.2	65.00	69.16	4.16	6.	
nowplow and flanger, per mile Vork train with excavator, per	. 0425	. 0425	.00	.0					
mile	. 0427	. 0427	.00	.0					
Yard: Average rate for groups 1, 2, and 3, day and night, per hour	. 366	. 38	.014	3. 8					

		Brak	emen.		•	Flag	men.	
Class of service.	R	ate.	Increase.		Ra	ite.	Increase.	
	1910	1913	Amount	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Fort Wayne-Grand Rapids, s.t., per day. Fort Wayne-Wolcottville, r. t., per day Regularly assigned trainmen, per month. Fort Wayne-Wolcottville, mini- mum, per month. Snowplow and flanger, per mile. Work train with excavator, per mile. Yard: Average rate for groups 1, 2, and 3, day and night, per hour.	\$2. 40 2. 17 70. 00 65. 00 .031 .0302 .336	\$2, 55 2, 32 78, 00 69, 36 031 0302 35	\$0.15 .15 8.00 4.36 .00 .00 .00	6.3 6.9 11.4 6.7 .0	\$0.032 .0315	\$0.032 .0315	\$0.00	0.0

	Condu	ictors.	Baggag	gemen.	Bra	kemen.	Mile-
Runs.	1910	1913	1910	1913	1910	1913	age.
Paggenger: Fort Wayne-Grand Rapids, s. t. Fort Wayne-Wolcottville, r. t. Overtime per hour Regularly assigned passenger trainmen, monthly guaranty. Minimum, Fort Wayne-Wolcottville	\$4.60 3.60 .45 135.00 108.20	\$2.60 2.17 ,26 75.00 65.00	\$2.75 2.31 .275 82.50 69.16	\$2, 40 2, 17 , 25 70, 00 65, 00	2. 32 5   2.55 0   78. 00	142 74	
Class of employees	Snowp flang per n	er serv		Vork tra kcavator,			
			1910	191	.3	1910	1913
Conductors Brakemen Flagmen			\$0.042 .031 .032	.0	1425 131 132	\$0.0427 .0302 .0315	\$0.0427 .0302 .0315
Class of employees.		Group hou					o 3, per our.
		1910	1913	1910	1913	1910	1913
Yard service: Day conductors Day brakemen Night conductors Night brakemen			\$0.38 .35 .40 .37	\$0.35 .32 .37 .34	\$0.37 .34 .39 .36	.32	\$0. 36 . 33 . 38 . 35

### GRAND RAPIDS & INDIANA RAILWAY CO., NORTHERN DIVISION.

On the northern division of this railroad the changes in rates of pay as the result of the arbitration were practically the same, with the exception of the average rates a day for certain trips and in yard service, where the increases were somewhat smaller than for the southern division. A detailed comparison of rates on the northern division before and after the arbitration, together with the amount and per cent of increases in rates of pay to conductors and trainmen, is shown in the table following:

Amount and per cent of increase in rates of pay of conductors and trainmen as the result of the award of the board of arbitration, effective Nov. 10, 1913.

		Conduc	tors.		Baggagemen.				
Class of service.	Ra	te.	Increase. Rate.			Increase.			
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent:	
Average rate per specified trip, per day Traverse City branch, regularly assigned trainmen, minimum	\$5.61	\$5.64	\$0.03	0.5	. \$3.13	\$3.16	\$0.03	1.0	
per month	110.00 .0425	119.02 .0425	9.02 .00	8.2	65.00	69.16	4.16	6.4	
Yard, average rate for groups 1,	. 0427	. 0427	. 00	.0					
2, and 3, day and night, per hour	.37	.38	.01	2.7					

		Brak	emen.	,		Flagmen.				
Class of service.	Ra	ate.	Increa	se.	Ra	ite.	Increa	se.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Average rate per specified trip, per day.  Traverse City branch, regularly assigned trainmen, minimum per	<b>\$2.93</b>	<b>\$</b> 3.00	\$0.07	2.4				- 7 - 4 - 4		
month.  Snow plow and flanger, per mile.  Work train, with excavator, per mile.  Yard, average rate for groups 1, 2, and	. 0302	69.36 .031 .0302	4.36 .00 .00	6.7 .0 .0	\$0.032 .0315	\$0.032 .0315	\$0.00 .00	0.0		
3, day and night, per hour	.34	.35	.01	2.9						

# Rates of pay of conductors and trainmen.

Class of service.	Condu	ictors.	Bagga	gemen.	Brak	emen.	Flag	Mile-	
Class of service.	1910	1913	1910	1913	1910	1913	1910	1913	age.
Passenger runs:		,							
Grand Rapids-Mackinaw City, single trip Grand Rapids-Mackinaw	\$6.89	\$6.89	\$3.85	\$3.85	\$3.39	\$3.62	•••••		226
City via Harbor Springs, single trip Grand Rapids-Muske-	7.08	7.08	4.01	4.01	3.54	3.78			236
gon, 2 round trips			2.72	2.75	2.86	2.56			160
Traverse City-Walton Junction, 2 round trips Traverse City branch,	3.60	3.90	1.91	2.03	1.91	2.04			104
monthly minimum reg- ular service Overtime, per hour	110.00	119.02 .45	65.00	69.16 .27	65.00 .25	69.36			
Snow plow and flanger service, per mile	. 0425	. 0425			.031	. 031	\$0.032	\$0.032	
Work train with excavator, per mile	. 0427	. 0427			.0302	. 0302	.0315	. 0315	

	Grou	ıp 1.	Grou	ıp 2.	Group 3.		
Class of employees.	1910	1913	1910	1913	1910	1913	
Yard service: Day conductors. Day brakemen. Night conductors. Night brakemen.	\$0.37 .34 .39 .36	\$0.38 .35 .40 .37	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	\$0.35 .32 .37 .34	\$0.36 .33 .38 .35	

Baggagemen.

#### HOCKING VALLEY RAILWAY CO.

Considerable advances in rates of pay for mine-run service came, as can be seen from the following table, to train crews on the Hocking Valley Railway as the result of the award. The increases in rates per day, by occupations, were as follows:

Class of employees.	Amount.	Per cent.
Conductors Brakemen Flagmen	50	21. 6 20. 0 17. 6

In local freight service the rates of pay of conductors were 12.5 per cent higher after the award; brakemen, 11.1 per cent; and flagmen, 7.1 per cent. Conductors in through freight, work, wreck, and circus train service were advanced 9.6 per cent; brakemen, 9 per cent; and flagmen, 4.7 per cent. The increase in rates per mile for a standard day to passenger conductors was 8.2 per cent, and to baggagemen and brakemen 6.5 and 6.7 per cent, respectively.

Amount and per cent of increase in rates of pay of conductors and trainmen as the result of the award of the board of arbitration, effective Nov. 10, 1913.

Conductors.

									00			
Class of servi	ce.		Rat	е.	In	crease.		Rat	te.	1	Increase.	
			1910		Amour	nt. P	er nt. 1	910	1913.	Amo	unt.	Per cent.
Passenger: Standard rate, per Electric trains, pe Through freight, per tage. Local freight, per day Work, wreck, and cir per day	r hour nile cus trai	4. 3.	2333 0365	\$0.029 .252 .04 4.50 4.50 4.00	\$0.000 .013 .000 .50 .80	87 35 1 2	8. 2 \$0. 8. 0 9. 6 9. 6 9. 6		80. 0165		001	6.5
		Brake	kemen. Flagmen. List men.									
Class of service.	Ra	ite.	Incr	ease.	Rate.		Incre	ncrease.		Rate.		ease.
Class of set vice.	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	0161	1913	Amount.	Per cent.
Passenger, standard rate, per mile	\$0.015 .0245 2.70 2.50		\$0.001 .0025 .30 .50	11.1	\$0. 0255 2. 80 2. 55	\$0.0267 3.00 3.00	\$0.0012 .20 .45	7.1	\$2.90			

9.0 2.55

2.67

.12

Work, wreck, and circus trains, per day.

2, 45

2,67

. 22

	Condi	actors.	Bagga	gemen.	Brak	emen.	Flag	men.	List	men.
Class of service or run.	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913
Passenger:										•
Standard 1 per mile	\$0.0268	\$0.029	\$0.0155	\$0.0165	\$0.015	\$0.016		\$0.016		
Runs of less than 155 miles,										
per day	. 2333	4.50		2.75		2.55		2.60		
Electric trams, per hour Regularly assigned train-	. 2333	. 252					•			
men, monthly guaranty		135.00		82.50		76, 50		78.00		
Freight:		200.00		02.00		10.00		10.00		
Through, per mile	. 0365				. 0245	. 0267	\$0.0255	. 0267		
Local, etc., per day	4.00	<sup>2</sup> 4. 50			2.70	23.00		23.00	\$2.90	2\$3.00
Mine runs, per day	3.70	<sup>2</sup> <b>4</b> . 50			2.50	23.00	2.55	$^{2}3.00$		
Work, wreck, and circus	3, 65	24.00			2.45	22,67	2, 55	0.0 07		
trains, per day Overtime:	3.05	"4.00			2.40	~ 2.07	2. 55	2 2. 67		
Passenger (after 2 hours										
late on schedule, 1910; ar-										
ticle C of award, 1913), per										
_ hour	.42	. 45	. 25	. 275	. 23	. 255				
Through freight, per hour	. 36	.40			. 24	. 267	. 25	. 267		
Local and Walbridge- Columbus pick-up	. 40	. 45		1	.27	. 30	. 28	.30		
Work, wreck, and eircus	. 40	. 40			. 21	. 30	. 28	30		
trains	. 36	. 40			. 24	. 267	. 25	. 267		
Mine runs	.37	.45			. 25	.300	. 25	.300		

<sup>1 1910,</sup> through service; runs of 155 miles or over, 1913.

#### KANAWHA & MICHIGAN RAILWAY CO.

On the Kanawha & Michigan Railway passenger conductors' rates of pay were about 8 per cent higher after the award of the arbitration board. Rates to baggagemen were from 4.4 to 6.1 per cent greater, and to passenger brakemen from 6.7 to 9.3 more than they were before the decision of the board.

Yardmen received, as the result of the arbitration, 1 cent an hour increase in rates of pay, which was equivalent to increases of approxi-

mately 3 per cent.

In through freight service rates of pay to conductors were increased 9.6 per cent, to brakemen 9 per cent, and to flagmen 4.7 per cent. Conductors in local freight service were allowed by the arbitration board advances of 12.5 per cent, brakemen 11.1 per cent, and flagmen 7.1 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Baggagemen handling express.						
*	Ra	te.	Increase.		Ra	ate.	Increase.	
Class of service.	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Runs of 155 miles or over, per mile. Monthly guaranty, minimum Freight: Through and irregular, per mile. Local and pick-up, per mile. Yard: Hobson and Charleston, average rate, day and night, per hour.	\$0.0268 125.00 .0365 .04	\$0.029 135.00 .04 .045	\$0.0022 10.00 .0035 .005			<b>\$</b> 0. 0175 82. 50	\$0.0010 3.50	6.1

<sup>&</sup>lt;sup>2</sup> Minimum, 100 miles.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentage.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1918—Continued.

	•	Brak	emen.		Flagmen.				
Class of service.	Rate.		Increase.		Rate.		Increase.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger: Runs of 155 miles or over, per mile. Monthly guaranty, minimum Freight: Through and irregular, per mile Local and pick-up, per mile Yard: Hobson and Charleston, aver-		\$0.016 76.50 .0267 .03 .031	\$0.001 6.50 .0022 .003 .002	6.7 9.3 9.0 11.1 6.9	\$0.0255 .028		\$0.0012 .002	4.7 7.1	
age rate, day and night, per hour	. 33	.34	.01	3.0					

<sup>1</sup> Brakeman handling list.

# Rates of pay of conductors and trainmen.

Passenger service.	Condu	ctors.	Baggagemen handling ex- press.		ex- Brakemen.		Baggagemen.		Flagmen.	
	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913
Runs of 155 miles or over, per mile 1	\$0.0268 125.00 3.42		\$0.0165 79.00 3.25	\$0.0175  82.50  4.275	\$0.015 70.00 3.23	\$0.016 76.50 4.255		\$0. 0165 82. 50 4. 275		\$0.016 78.00 4.255

Freight service.	Condu	ictors.	Flag	men.	Brakemen.		
	1910	1913	1910	1913	1910	1913	
Through and irregular, per mile	\$0.0365 6.04	5 \$0. 04 5. 045	\$0.0255 6.028	5 <b>\$</b> 0. <b>02</b> 67 5. 03	\$0.0245 { 6.027 7.029	<sup>5</sup> \$0.0267 <sup>6</sup> .030 <sup>6</sup> .031	

Runs.	Miles.	Overtim	e after—
		1910	1913
Freight mileage allowed: Hobson to Columbus via H. V. Ry. Hobson to West Columbus via H. V. Ry. Hobson to West Columbus via T. & O. C. Ry. Hobson to Corning and return Hobson to Corning. Hobson to Chauncey and return Hobson to Chauncey.  Hobson to Dickinson Hobson to Charleston and return Hobson to Charleston.	109 111 124 114 100 100 100 138 100	Hours, 10.55 11.05 12.25 11.25 10.00 9.00 10.00 10.00 13.50 10.00	Hours. 10.54 11.06 12.24 11.24 10.00 10.00 10.00 13.48 10.00

<sup>On runs of less than 155 miles, rates in 1913, as follows: Conductors, \$4.50; baggagemen, \$2.75; flagmen or rear brakemen, \$2.60; brakemen, \$2.55 per day.
Governing regularly assigned passenger trainmen, in 1913, ready for service the entire month.
Overtime to be paid on the basis of 20 miles per hour.
Overtime; all service on the minute basis.
Overtime after 10 miles per hour pro rata on minute basis.
Overtime after 10 hours: Conductors, 40 cents; brakemen, 28 cents.
Trakemen handling list.</sup> 

<sup>&</sup>lt;sup>7</sup> Brakemen handling list.

### Rates of pay of conductors and trainmen—Continued.

Class of employees,	Yard	service.
Class of employees,	 1910	1913
Hobson and Charleston: Day conductors.	Cents.	Cents.
Day brakemen Night conductors Night brakemen	 32 37 34	33 38 35

#### LAKE ERIE & WESTERN RAILROAD CO.

On the Lake Erie & Western Railroad the award of the arbitration board had the effect of advancing the rates of pay to passenger conductors 8.2 per cent; to baggagemen not handling express, 6.5 per cent; and to brakemen, 6.7 per cent. In through and irregular freight service, as well as on construction trains, both conductors and brakemen had their rates of pay increased somewhat more than 10 per cent per mile, while on special runs conductors were advanced from 10 to 13.2 per cent, and brakemen from 10.3 to 11.1 per cent.

Conductors and switchmen in yard service were given an increase of 1 cent per hour.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

	Conductors.						Baggagemen handling express.					
Class of service.	Ra	Rate.		Increase.		Rate.	Increase.					
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.				
Passenger, standard, per mile Freight, through and irregu-	\$0.0268	1 \$0. 029	\$0.0022	8. 2	<b>\$0.0165</b>	1 \$0. 0165	\$0.00	0.0				
lar, construction, snow- plow, etc., per mile <sup>2</sup> Through freight, special runs:	. 0363	. 04	. 0037	10.2								
Minster branch, per month <sup>3</sup> . Rushville branch, per	90.00	101.90	11.90	13. 2								
month <sup>3</sup>	95, 00	107.55	12, 55	13. 2								
per day	3.63	4.00	. 37	10.2								
mixed runs, per month <sup>3</sup>	100.00	110.00	10.00	10.0				· · · · · ·				

	Baggagemen expi					Brakemen.					
Class of service.	R	ate.	Increa	se.	R	ate.	Increase.				
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per.			
Passenger, standard, per mile Freight, through and irregular, construction, snowplow, etc., per mile <sup>2</sup> .		1 \$0, 0165	\$0.001	6.5	\$0.015	1 \$0.016	\$0.001 .0025	6.7			
Through freight, special runs:  Minster branch, per month <sup>3</sup> .  Rushville branch, per month <sup>3</sup> Nobesville switch run, per					63. 00 65. 00	70. 00 72. 20	7. 00 7. 20	11.1 11.1			
Delphos and Akron, mixed runs, per month 3					2. 42 65. 00	2. 67 71. 70	. 25 6. 70	10.3			

<sup>1</sup> Runs of 155 miles per day or over. <sup>2</sup> Runs of 100 miles or less, either straightaway or turn around, to be paid for as 100 miles.

3 Rates per month of calendar working days.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitrators, effective Nov. 10, 1913—Continued.

	Fore	emen an	d conducto	ors.	Switchmen.				
Yards.	Ra	ite.	Increa	se.	Ra	ite.	Increase.		
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.	
Indianapolis, average, day and night, per hour Lima, Tipton, and Muncie, per hour All other yards, per hour	\$0.39 .38 .37	\$0.39 .39 .38	\$0.00 .01 .01	0.0 2.6 2.7	\$0.36 .35 .34	\$0.36 .36 .35	\$0.00 .01 .01	0. 0 2. 9 2. 9	

Rates of	pay of	condu	ctors o	and train	men.			
Class of employees.	Stand	Standard rate per mile.			Regulassign passer trainm month guaran	ned nger nen, hly	Overtin hou	ne, per
	1911	19	13	1913	1913	3	1911	1913
Passenger service: Conductors. Assistant conductors, ticket collectors. Baggagemen handling express. Baggagemen not handling express Flagmen or rear brakemen. Brakemen.	. 01	2 . 35 2 . 55 2 .	029 023 0165 0165	\$4.50 3.57 2.75 2.75 2.60 2.55	85 85 78	5. 00 2. 50 2. 50 3. 00 3. 50	\$0. 42 . 25 . 25 . 25	\$0. 45 . 357 . 275 . 275 . 26 . 255
Class of employees	J.			Through as freight, consumption snowplow mile.	onstruct	ion.	Local i	
				1911	1913	3	1911	1913
Conductors Flagmen Brakemen Foremen				3 \$0.0363 3.0242			er day. \$3.975 2.70 2.80	Per mile.  4 \$0.045  3.03  3.03
	For	emen an	d cond	uctors.		Swite	chmen.	
Yards.5	19	11		1913	19	11		1913
	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.
Indianapolis Lima, Tipton, and Muncie All other yards	\$0.38 .37 .36	\$0.40 .39 .38	\$0.38 .38	3 .40	\$0.35 .34 .33	\$0.37 .36 .35	\$0.35 .35 .34	. 37

<sup>.38</sup> Overtime does not accrue until 7 hours and 45 minutes from time of first reporting for duty.

Runs of 105 miles or less, either straightaway or turn around, paid for as 100 miles.

Runs of 100 miles or less, either straightaway or turn around, paid for as 100 miles.

Overtime after 10 hours.

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

### Rates of pay of conductors and trainmen—Continued.

		1911			1913	Overtime after.		
Runs.	Conduc- tors.	Fore- men.	Brake- men.	Conduc- tors.	Fore- men,	Brake- men.	1911	1913
Through freight service, special runs:  Minster branch 1. Rushville branch 1. Nobesville switch run 2. Delphos and Akron, mixed runs 1.	\$90.00 95.00 3.63 100.00	\$2.52	\$63.00 65.00 2.42 65.00	\$101.90 107.55 4.00		\$70.00 72.20 2.67 71.70	Hours. 11 11 10 None.	Hours. 10 10 10 10

<sup>1</sup> Rates per month of calendar working days.

### Daily rates of employees called as witnesses in suits in which company is interested.

	1911	1913
Conductors .	\$3.50	\$3.85
Brakemen and switchmen .	2.50	2.75

Note.-A day's work (1911 and 1913), 100 miles or 10 hours.

#### LAKE SHORE & MICHIGAN SOUTHERN RAILWAY CO.

On the Lake Shore & Michigan Southern Railway the award of the arbitration board, as can be seen from the following table, gave increases in rates of pay to passenger conductors in main-line service of approximately 8 per cent and on branch-line trains of 7.1 per cent. On short turn-around trips rates to conductors were advanced slightly more than 13 per cent. To conductors in through and irregular freight services increases were given of 10.2 per cent and in local and pick-up freight service of 13.2 per cent.

Baggagemen and expressmen, passenger brakemen, and collectors in Chicago suburban passenger service had their rates of pay advanced by the arbitration award from 6.1 to 6.7 per cent. On short turnaround runs brakemen received increases in rates of pay of 11.1 per cent. Brakemen in through and irregular freight-train service received advances of 10.3 per cent and in local and pick-up freight

service 11.1 per cent.

<sup>&</sup>lt;sup>2</sup> Rates, per day, as specified.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of

		Cond	uctors.			Bagga	gemen.	
Class of service.	1R	ate.	Incre	ase.	R	ate.	Incre	ase.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile Minimum monthlyrate. Branch lines, per day <sup>2</sup> . Freight:	\$0. 0268 125. 00 4. 20	1 \$0. 029 135. 00 4. 50	\$0.0022 10.00 .30	8. 2 8. 0 7. 1	\$0.0155 75.00 2.75	1 <b>\$0.01</b> 65 82.50 2.75	\$0.001 7.50 .00	6. £ 10. 6
Through and irregular, work, construction, snowplow, circus, or wreck train service, per mile Way freight, local.	. 0363	1.04	. 0037	10.2				
pick-up, and drop, per mile	. 03975	1.045	. 00525	13. 2		<b></b>		
etc., divisions, per mile	. 0363	1.0411	.0048	13. 2		······································		
around trips: Sharon branch, per mile	. 0397	. 045	. 0053	13. 4				
Hillsdale, Jonesville, etc., per month Ostego switch run, per	95.00	107. 54	12.54	13.2				
month	90.00	101.88	11.88	13.2			<u>.</u>	
	Joint	baggage ar	nd expressi	nen.		Brak	emen.	
Class of service.	Ra	ite.	Incre	ase.	R	ate.	Incres	ase.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile Minimum monthly rate. Branch lines, per day 2.	\$0.0165 79.00	1 \$0. 0175 86. 50	\$0.001 7.50	6. 1 9. 5	\$0.015 70.00 2.55	1 \$0.016 76.50 2.55	\$0.001 6.50 .00	6. 7 9. 8
Miscellaneous short turn- around trips: Sharon branch, per					. 027	. 03	. 003	11.1
mile					64.00	71. 10	7. 10	11. 1
Ostego switch run, per month					59.00	65. 55	6. 55	11.1
	Collectors	in Chicago	suburban	service.	1	Flagmen or	brakemen	
Class of service.	Ra	ite.	Incres	ase.	R	ate.	Incre	ase.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Minimum monthly rate	\$75.00	\$79.95	\$4.95	6. 6				
Freight: Through and irregular, work, construction, snowplow, circus, or wrock train service								
wreck train service, per mile					\$0.0242	1 \$0.0267	\$0.0025	10. \$
DICK-UD, AUG Gron.								
pick-up, and drop, per mile				- · · · · · · · ·	.027	1.03	. 003	11.1

 $<sup>1\,\,155</sup>$  miles a day or over.  $1\,\,\text{Except}$  Addison, Adrian, and Dundee run and Alliance division, in 1913, where rates were lower.

Class of employees,	Standa	ord rat	Minimum rate per day.	signed ger tra month	arly as- passen- inmen, ly guar- ty.	Overtime, per hour.			ch lines, r day.	
	1910	191	3 1 1913 2		1913	1910	1913	1910	1913 8	
Passenger service: Conductors Baggagemen. Joint baggage and ex-	\$0. 0268 . 0155	\$0. 02 . 01	65 2.75	\$125.00 75.00	\$135.00 82.50	\$0. 42 . 25	\$0. 45 . 27			
pressmen Brakemen Collectors in Chicago sub- urban service	. 0165	.01		79.00	76. 50	. 24	. 25			
Flagmen or rear brake- men  Joint baggagemen and expressmen (Lansing			2. 60		78. 00		. 26		2. 60	
division)		·····			82. 50					
Class of employee	S.		regular work, tion, sn circus,	Through and irregular freight, work, construction, snowplow, circus, or wreck train service.  Way freight, loca pick-up and drop service.			and	Adrian a ette, «e sions.	and Fay- te., divi-	
			1910	1913 <sup>1</sup>	1910	1910 1913 1		1910	1913 1	
Freight service: Conductors, per mile Flagmen or brakemen, pe			\$0. 0363 . 0242	\$0. 04 . 0267	\$0. 039 . 027		045 03	\$0. 0363 . 0242	\$0. 0411 . 0269	
	· Class	of en	nployees.					1910	1913	
Sharon branch— Conductors, per mile. Brakemen, per mile. Hillsdale. Jonesville. etc.	Conductors, per mile Brakemen, per mile									
Conductors, per mont Brakemen, per month Ostego switch run— Conductors, per mont	Conductors, per month         95.00         107.54           Brakemen, per month         64.00         71.10									

1 155 miles a day, or over.
 2 Less than 155 miles a day.
 3 Except Addison, Adrian, and Dundee run, and Alliance division in 1913, where rates were lower.

#### MAINE CENTRAL RAILROAD CO.

On this railroad passenger conductors, on a mileage basis for a standard day of 155 miles through the arbitration award, received an increase of 8.2 per cent in rates of pay and assistant conductors, baggagemen, and brakemen secured advances ranging from 6.5 to 7 per cent. Passenger conductors working under the conditions of a monthly guaranty had their minimum increased 8 per cent and baggagemen and brakemen 2.7 and 2 per cent, respectively.

In through-freight service the rates of pay of conductors were advanced 10.2 per cent by the arbitration award, brakemen 10.3 per cent, and flagmen 5.7 per cent. In local freight service the increases in rates of pay to conductors were 13.2 per cent, to brakemen 11.1 per cent and to flagmen 7.1 per cent. Yard crews secured an addition of 1 cent an hour to their rates, which was equivalent to a 2.7 per cent increase to conductors and 2.9 per cent to brakemen.

					Condu	ctors.			Assi	stant co	onductors.	
Class of s	ervice.			Rate.		Incr	ease.		Rate		Increas	Se.
			1910	)	1913.	Amount	Per cent.	1	910	1913	Amount.	Per cent.
Passenger: Standard, per Regularly ass ger trainm guaranty	signed p	onthly			\$0. 029 26. 00	\$0.0022 1.00	8.		1	\$0. 023 100. 00	\$0.0015 .00	7.0
Freight: Through and mile 1 Local freight, Yard, average ra 1, 2, and 3, day a hour	per mi	le 1 groups ht, per		863	. 04 . 045	· .0037	5 13.	2				
		Baggag	emen.			Brake	men.			Fla	gmen.	
Class of service.	Ra	ite.	Incre	ase.	R	Rate. Incr		ase.	R	ate.	Incre	ase.
Class of service.	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile Regularly assigned pasenger trainmen, monthly guaranty. Freight: Through and irreg-		\$0. 0165 77. 00			7 70. 00	\$0.016	\$0.001	6. 7				
ular, per mile 1 L o c a l freight, per mile 1. Yard, average rate for groups 1, 2, and 3, day and night, per hour					. 024		. 0025	10.3	. 028	.03	67 \$0.00145	5. 7 7. 1

 $<sup>^{\</sup>rm 1}$  Runs of 100 miles or less, either straight away or turn-around, paid for as 100 miles.

Class of e	mployees		Rate pe	er mile.	p	gularly passeng men, n guar	er trai	n-	for eac used n	ger mile owance ch day not less n—	Overti	me, per ur.
			1910	1913	1	910 1	191	3	1910	1913	1910 2	1913
Passenger: Conductors Assistant con Baggagemen Brakemen. Flagmen or 1	ductors.		\$0. 0268 . 0215 . 0155 . 0150	\$0.029 .023 .0165 .016		125. 00 100. 00 75. 00 70. 00	77 71	. 00 . 00 . 00 . 40	Miles. 157 157 177 170	Miles. 155 155 166 159 162	\$0.42 .33 .27 .25	\$0.45 .357 .275 .255 .26
	Throug irregul mi	ar, per		freight, mile.	pl	Vork, s low, or per m	relief,		Freight	t overti	me, per ho	our.
Class of em- ployees.	1910 3	1913 8	1910 3	1913 3		1910	1913		1910		191	3
	1910 \$	1919	1910	1919		1910	1919	Th	rough.	Local.	Through.	Local.
Freight: Conductors Flagmen Brakemen	\$0.03663 .02525 .0242	\$0.04 .0267 .0267	\$0.03978 .028 .027	\$0.045 .03 .03	Ι.	0363 02525 0242		\$(	0. 363 \$0 . 2525 . 242	). 3975 . 28 . 27	\$0.40 .267 .267	\$0.45 .30 .30
	12					Gı	oup 1.		Grou	ıp 2.	Gro	up 3.
(	class of en	ipioyees,				1910	19	13	1910	1913	1910	1913
Day brakeme Night condu	Vard: 4 Day conductors, per hour Day brakemen, per hour Night conductors, per hour Night brakemen, per hour					\$0.3 .3 .3	4	. 38 . 35 . 40 . 37	\$0.36 .33 .38 .35	\$0.37 .34 .39	.32	\$0.36 .33 .38 .35

<sup>1</sup> Overtime does not count in guaranty except such time in excess of 10 hours as is made in regular assignment.

<sup>2</sup> 10 hours or less constitute a day's work. Overtime paid for on minute basis.

Runs of 100 miles or less, either straightaway or turn-around, paid for as 100 miles.

Overtime: Over 10 hours paid at established rates per hour, provided employees do not work more than 12 hours and 30 minutes, otherwise they are paid on minute basis.

#### MICHIGAN CENTRAL RAILROAD CO.

On the Michigan Central Railroad there is a general increase in rates of pay for passenger conductors shown as the result of the arbitration of about 8 per cent. The only exception is to be found in the hourly rates for switching at certain points, which were advanced from 36.3 cents to 45 cents, or 24 per cent. Baggagemen and passenger brakemen on a mileage basis were advanced 6.5 and 6.7 per cent, respectively, and on the basis of monthly guaranties from 8 to 10 per cent. For switching service at various points, baggagemen hourly rates were advanced from 24.2 to 27.5 cents, or 13.6 per cent.

Conductors and brakemen in through freight service when working on a mileage basis had their rates increased as the result of the award of the arbitration board slightly more than 10 per cent. On local freight trains conductors received advances in rates of pay per mile of 13.2 per cent and brakemen 11.1 per cent. Yardmen had their rates of pay increased 1 cent an hour, or from 2.6 to 2.9 per cent.

On the Canada division conductors working on a monthly guaranty

On the Canada division conductors working on a monthly guaranty were advanced 13.2 per cent and baggagemen and brakemen 11.1

per cent.

		Conduc	tors.		Bagga	gemen.
Class of service.	Ra	te.	Inc	rease.	Ra	ite.
	1910	1913	Amount.	Per cent.	1910	1913
Passenger:						
Standard, per mile  Minimum monthly guaranty  Exceptions—	\$0.0268 125.00	<b>\$0</b> . 029 135. 00	\$0.0022 10.00	8. 2 8. 0	\$0.0155 75.00	\$0.0165 82.50
No. 1, Battle Creek division, per day No. 2, South Haven, South	4. 20	4. 545	. 345	8.2	2.75	2. 926
Bend, S. B. & N. W. division, Welland and Niagara Falls, Joliet, Air Line, Benton, Harbor, east division trains 25 and 26; rates for the						
calendar working days of the month, per month. S. B. & N. W. division for switch-	115.00	<b>124</b> . 20	9.20	8.0	70.00	75. 60
ing at Pinconning and Gladwin, per hour. Bridge division, Niagara division, St. Clair division, Michigan Mid-	. 363	. 45	. 087	24.0		
land di ision, per month	100.00	108.00	8.00	8.0	65.00	70. 20
month	100.00	108.00	8.00	8.0	67.75	73. 17
hour.	. 363	. 45 108, 00	. 087	24.0	. 242	. 275
Cano branch, per month.  London Division, per month	100.00 100.00	108.00	8.00 8.00	8. 0 8. 0	65.00 65.00	70. 20
For switching at London, per hour. On trains Nos. 156, 157, 158, 159, on Mackinaw division—four crews	. 363	. 45	. 087	24.0	. 242	. 275
per month Welland-Niagara Falls, mixed,	125.00	125.00	.00	.0	75.00	75.00
per month	115. 00	124. 20	9. 20	8.0	75.00	81.00
Through, per mile	. 0363	.04	.0037	10.2		
Way, local, etc., per mile	. 03975	. 045	. 00525	13.2		
Monthly guaranty Ypsilanti crews, per hour	.37	.38	20.00	17. 4 2. 7		
Yard, average rate, day and night, per		.00	.01			
Canada division: Amherstburg division, one	. 38	. 39	. 01	2.6		*******
crew, per month	90.00	101.88	11.88	13. 2	65.00	72. 21
brakemen when wanted, per month.	90.00	101.88	11.88	13.2	65.00	72. 21
Leamington division, one crew, per month	90.00	101.88	11.88	13.2	67.50	75.00

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

	Bagga	gemen.		Brak	emen.	
Class of service.	Incr	ease.	Ra	ite.	Incr	ease.
	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Standard, per mile. Minimum monthly guaranty. Exceptions—	\$0.001 7.50	6. 5 10. 0	\$0. 015 70. 00	\$0.016 76.50	\$0.001 6.50	6. 7 9. 3
No. 1, Battle Creek division, per day  No. 2, South Haven, South Bend, S. B. & N. W. division, Welland and Niagara Falls, Joliet, Air Line, Benton Harbor, east division trains 25 and 26—rates for	.176	6.4	2. 55	2. 728	.178	7.0
the calendar working days of the month, per month S. B. & N. W. division for switching at Pinconning and Gladwin, per	5. 60	8.0	65. 00	70. 20	5. 20	8.0
hour Bridge division, Niagara division, St. Clair division, Michigan Midland			. 242	. 26	.018	7.4
division, per month.  North Midland division, per month.  For switching at Midland, per hour. Cano branch, per month. Loudon division, per month.  For switching at Loudon, per hour. On trains Nos. 156, 157, 158, 159, on Mackinaw division—four crews, per	5. 20 5. 42 . 033 5. 20 5. 20 . 033	8.0 8.0 13.6 8.0 8.0 13.6	60. 00 60. 00 . 242 60. 00 60. 00 . 242	64. 80 64. 80 . 26 64. 80 64. 80 . 26	4.80 4.80 .018 4.80 4.80 .018	8. 0 8. 0 7. 4 8. 0 8. 0 7. 4
month. Welland-Niagara Falls, mixed, per month.	6.00	.0 8.0	70.00	70.00	.00	.0
Freight: Through, per mile Way, local, etc., per mile Monthly guaranty. Ypsilanti crews, per hour.			. 0242 . 027 80. 00 . 34	. 0267 . 03 92. 50 . 35	. 0025 . 003 12. 50 . 01	10.3 11.1 15.6 2.9
hour			.35	.36	.01	2.9
Amherstburg division, one crew, per month. Petrolia division, one crew, and	7.21	11.1	60.00	66. 66	6. 66	11.1
brakemen when wanted, per month  Leamington division, one crew,	7.21	11.1	6000	66.66	6.66	11.1
per month	7.50	11.1				

# Rates of pay of conductors and trainmen.

Class of service.	Condu	ictors.	Brakemen.		
Class of service.	1910	1913	1910	1913	
Freight: Through freight, per mile. Way freight, local, etc., per mile. Monthly guaranty Ypsilanti crews, per hour.	\$0.0363 .03975 115.00 .37	\$0.04 .045 135.00 .38	\$0.0242 .027 1 80.00 .34	\$0. 0267 . 03 1 92. 50 . 35	

<sup>1</sup> Pool freight service.

# Rates of pay of conductors and trainmen—Continued.

		Conduc	etors.	Bagga	agemen		Brake	men.
Class of service.		1910	1913	1910	191	3	1910	1913
Passenger: Standard, per mile. Overtime, per hour 2. Do.3.		0. 0268 . 42 . 35	1 \$0. 029 . 45 . 45	\$0.0155 .25 .24	.2	165 75 75,	\$0.015 .24 .23	1 \$0. 016 . 255 . 255
Regularly assigned trainmen, monthly guaranty.	y 12	5. 00	135. 00	75.00	82.5	0	70.00	76, 50
Exceptions—	y -	4. 20	4. 545	2.75	2.9	26	2.55	2.728
South Haven, South Bend South Bend & Northwest ern division, Welland & Niagara Falls, Joliet, Ai Line, Benton Harbor, eas division trains 25 and 26 rates for the calendar work								
ing days of the month  South Bend & Northwestern division, for switching a Pinconning and Gladwin	11 n t	5. 00	124. 20	70.00	75. 6	0	65.00	70. 20
per hour. Bridge division, Niagara divi sion, St. Clair division Michigan Midland division	-	. 3630	. 45	•••••	2	75	. 242	.26
monthly North Midland division	10	0.00	108.00	65.00	70.2	0	60.00	64. 80
monthly 4. For switching at Midland	10	0.00	108.00	67. 75	73.1	7	60.00	64. 80
per hour  Caro Branch, per month 4  London division, per month  For switching at London, pe	10	. 363 0. 00 0. 00	. 45 108. 00 108. 00	. 242 65. 00 65. 00	70. 2 70. 2 70. 2	0	. 242 60. 00 60. 00	. 26 64. 80 64. 80
hour. On trains Nos. 156, 157, 158 159, on Mackinaw division 4 crews, per month. Welland-Niagara Falls, mixed	,	. 363 5. 00 5. 00	. 45 125. 00 124. 20	75. 00 75. 00	75.0	0	70.00	70.00
]		ondue-	Day b		Night o			t brake- nen.
1	1910	1913	1910	1913	1910	1913	1910	1913
Yard service, all yards	\$0.37	\$0.38	\$0.34	\$0.35	\$0.39	\$0.40	\$0.36	\$0.37
Yard service.		Condu	etors.	Bagg	agemen		Brake	men.
r ard service.		1910	1913	1910	191	3	1910	1913
Canada division: Amherst division, one crew, permonth. Petrolia division, one crew and brake		\$90.00	\$101.88	\$65.00	\$72	. 21	\$60.00	\$66.66
men when wanted, per month Leamington division, one crew, pe month.	r	90. 00	101. 88 101. 88	65. 00 67. 50		. 21	60.00	66. 66

<sup>1</sup> Rate for runs of 155 miles per day and over. Runs of less than 155 miles: Conductors, \$4.50 per day; baggagemen, \$2.75 per day; brakemen, \$2.55 per day.

2 For crews where conductors earn more than \$125 per month.

3 For crews where conductors earn less than \$125 per month.

4 One day off each week exclusive of Sunday.

# NEW YORK CENTRAL & HUDSON RIVER RAILROAD CO.

As the result of the award of the arbitration board, conductors in main and branch line passenger service and on milk trains had their rates of pay advanced about 8 per cent. In through and irregular freight service increases to conductors on a mileage basis amounted to 10.2 per cent; and in local and pick-up freight service, to 13.2 per cent. Assistant conductors had their rates of pay advanced about 7 per cent.

Baggagemen employed on the basis of a standard day of 155 miles received an increase in rates of pay of 6.5 per cent, while in branchline service on the basis of a monthly guaranty, they secured an increase of approximately 10 per cent as the result of the arbitration

award.

The rates paid to passenger brakemen were from 6.7 to 11.4 per cent higher with the exception of one run at a rate 24 per cent higher after the award of the arbitration board. In through-freight service brakemen secured an advance in rates of pay of 10.3 per cent; in work and construction service, 6.8 per cent; and on local and pick-up freight, 11.1 per cent.

Yardmen had their rates advanced 1 cent an hour, which is

equivalent to an increase of 2.7 to 2.9 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Conduct	tors.		Ass	sistant co	nductors.	
Class of service.	Ra	te.	Increa	se.	Rat	e.	Increa	se.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
0								
Passenger:		20.000	20.0000		00 0015	00.000		
Standard, per mile Minimum allowance, per	\$0.0268	\$0.029	\$0.0022	8.2	\$0.0215	\$0.023	\$0.0015	7.0
day	4. 20 125. 00	4.50 135.00	. 30 10. 00	7.1. 8.0	3: 35 100: 00	3. 57 106. 57	. 22 6. 57	6. 6 6. 6
Weehawken and Suspen-								
sion Bridge and Buffalo, per mile	. 024	. 026	.002	8.3				
Branch passenger:	1021							
Chenango branch, Syracuse crew, per month	105, 00	113, 40	8.40	8.0				
Chenango branch, Earlyille	122, 00	131.76	9.76	8.0				
crew, per month	122.00	151.70	9.70	0.0				
Duyvil branch, per month	105.00	113, 40	8, 40	8.0				
Harlem division, Mehopac			1					
branch, per month Wellsboro branch, per	110.00	118.80	8.80	8.0				
month	115.00	124. 20	9. 20	8.0				
Morris Run branch, per month	115.00	124. 20	9. 20	8.0				
Walkill Valley branch— Kingston and Mont-								
gomery crew, per		101.00						
month Kingston & Campbell	115.00	124. 20	9. 20	8.0				*****
crew, per month	120.00	129.60	9.60	8.0				
Cape Vincent branch, per month	115, 00	124, 20	9, 20	8.0				
PennYanbranch, permonth.	115.00	124. 20	9. 20	8.0				
Rossiter branch, per month.	105.00	113.40	8.40	8.0				

				1				
-		Conduct	ors.		Ass	sistant co	onductors.	
Class of service.	Rat	te.	Increa	se.	Rat	е.	Increas	se.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Milk trains:  Mohawk division, per mile.  Mohawk division, mini-	<b>\$0.0268</b>	\$0.029	\$0.0022	8. 2				
mum wage per day St. Lawrence and Ontario	4.60	4.98	.38	8.3				
division, per mile St. Lawrence and Ontario	. 0268	0. 29	. 0022	8.2				
division, minimum wage, per day Freight: Through and irregular, per	4.60	4.98	. 38	8.3				
Through and irregular, per mile	. 0363	. 04	.0037	10.2				
ice, per mile²  Local freight, pick-up	. 0363	.04	.0037	10. 2				
and drop service, per mile 3	. 03975	.045	. 00525	13.2				
1, 2, and 3, day and night, per hour	.37	.38	.01	2.7				
		Baggage	emen.			Flagi	nen.	
Class of service.	Ra	ate.	Incre	ase.	Ra	te.	Increa	se.
	1910	1913	Amount	Per cent.	1910	1913	Amount.	Per
Passenger: Standard, per mile Minimum allowance, per day Monthly guaranty. Pay on trains between New York and Buffalo, or Weehauken and Suspension Bridge and Buffalo,	\$0.0155 2.75 75.00	\$0.0165 2.75 82.50	\$0.001 .00 7.50	.0	<b>\$</b> 0. 01525 <b>72.</b> 50	\$0.016 78.00	<b>\$</b> 0.00075	4.
Branch passenger:	. 0139	.0149	.001	7.2	. 0137	. 0146	. 0009	6.
crew, per month	62.00	68. 20	6. 20	10.0				
Hudson division: Thirtieth	70.00	77.00	7.00	10.0				
Street and S p u y t e n - Duyvil branch, per month. Harlem division, Mehopac	60.00	66.00	6.00	10.0				
Wellsboro branch, per month Morris Run branch, per	66. 00 69. 09	<b>72.</b> 50 <b>75.</b> 90	6. 50 6. 81	9.8				
month Walkill Valley Branch— Kingston and Montgom- ery crew, per month	69.00	75. 90	6. 90	10.0				
Kingston and Campbell crew, per month	69.00	75. 90	6. 90	10.0				
	69.00	75. 90 75. 90	6. 90 6. 90	10.0				
Cape Vincent Branch, per month.  Penn Yan branch, per month.	69.00	10.00	0.00					1
month. Penn Yan branch, per month. Freight: Through and irregular, per mile.	69.00				. 02525	. 0267	. 00145	5.
month. Penn Yan branch, per month. Freight: Through and irregular, per	69.00				.02525	.0267	.00145	5. 5.

		Brakem	ien.		Milk n	essenger and tra	s, baggage inmen.	men,
Class of service.	Ra	te.	Increas	se.	Ra	te.	Increas	se.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger:								
Standard, per mile. Minimum allowance, per day. Monthly guaranty. Pay on trains between New	\$0.015 2.55 70.00	\$0.016 2.55 76.50	\$0.001 .00 6.50	6.7 .0 .9.3				
York and Buffalo or Wee- hawken and Suspension Bridge and Buffalo, per mile	. 0134	.0143	.0009	6.7				-
Branch passenger: Chenango branch, Syracuse								
crew, per month	62.00	69.08	7.08	11.4				
crew, per month Hudson division; Thirtieth	70.00	78.00	8.00	11.4				
Street and Spuyten-Duyvil branch, per month	60.00	66.85	6.85	11.4				
Harlem division, Mahopac branch, per month Wellsboro branch	62.00 1.0242	69.08 1.0267	7.08 .0025	11.4 10.3				
Morris Run branch, per month	1.0242	1.03	. 0058	24.0				
Kingston and Montgom- ery crew, per month Kingston and Campbell	69.00	76.88	7.88	11.4				
crew, per month Cape Vincent branch, per	69.00	76.88	7.88	11.4				
month	65.00 69.00	72.43 76.88	7.43 7.88	11.4 11.4				
Milk train:  Mohawk division, per mile					\$0.0155	\$0.0165	\$0.001	6.
Mohawk division, minimum wage per day					2.75	2.93	.18	6.
St. Lawrence and Ontario division, per mile St. Lawrence and Ontario					. 0155	.0165	.001	6.
division, minimum wage per day					2.75	2.93	.18	6.
Through and irregular, per mile.	. 0242	. 0267	.0025	10.3				
Work, construction, and wreck train service, per mile <sup>2</sup>	. 025	.0267	.0017	6.8				
Local freight, pick-up and drop service, per mile 3	.027	.03	. 003	11.1				
Yard, average rate for groups 1, 2, and 3, day and night, per hour	.34	.35	.01	2.9				

Per mile.
 Including "ballast and filling" service in 1910; and snowplow and circus train service in 1913.
 Including "mine" service in 1913.

Class of employ- ees.		ard rate mile.	Minim lowar day.	um al- ace per	sign sen me	larly led I ger tra 1, mor guaran	oas- in- ith-	Overtime per		weehav Susp	rains be- few York uffalo or vken and e n s i o n and Buf- rmile.
	1910	1913	1910	1913	1910	19	)13	1910	1913	1910	1913
Passenger service: Conductors Assistant	Cents. 2.68	Cents. 2.90	\$4.20	\$4.50	\$125.00 \$135.00 100.00 106.57			Cents 4:	2 45.	Cents. 2. 40	Cents. 2.60
conductors Baggagemen Flagmen Brakemen	2. 15 1. 55 1. 525 1. 50	2.30 1.65 1.60 1.60	3. 35 2. 75 2. 55	3. 57 2. 75 2. 60 2. 55	75. 0 72. 5 70. 0	82	2. 50 3. 00 5. 50	33 24 24 24	5 27.5 4 26.0	1.39 1.37 1.34	1. 49 1. 46 1. 43
Class	of emplo	yees.			ngo bra cuse cr				branch, le crew.	Hudson Thirtiet and Duyvil	Spuyten
				1910 1913			1	1910	1913	1910	1913
Baggagemen,	anch passenger: Conductors, per month. Baggagemen, per month. Brakemen, per month.			\$105. ( 62. ( 62. (	05. 00 \$113. 62. 00 68. 62. 00 69.		\$1	122.00 70.00 70.00	\$131. 76 77. 00 78. 00	\$105.00 60.00 60.00	\$113. 40 66. 00 66. 85
Class	of emplo	vees.		Harlem division, Mahopac branch.			W	ellsbor	o branch.	Morris Ru	n branch.
		. ,		1910	1	913	1	1910	1913	1910	1913
Branch passenger Conductors, I Baggagemen, Brakemen, pe	per mont per mor	1th	•••••	\$110.0 66.0 62.0	00	18. 80 72. 50 69. 08	\$1	115. 00 69. 09 (1)	\$124.20 75.90	\$115.00 (2)	\$124.20 (2)
Class	of emplo	yees.			ich, E	alley lings- Mont- w.	1	alkill branch ton an bell cre	d Camp-	Cape V	incent
				1910	1	913	1	1910	1913	1910	1913
Baggageman	Brakemen, per month Baggageman, per month Brakemen, per month.			\$115.0 69.0 69.0	00	24. 20 75. 90 76. 88	\$1	120.00 69.00 69.00	\$129.60 75.90 76.88	\$115.00 69.00 65.00	\$124.20 75.90 72.43
		,		Penn	Yan br	anch.	Ph	illipsb	urg branch	Rossiter	branch.
Class	of emplo	oyees.		1910		.913		1910	1913	1910	1913
Conductors, 1 Baggagemen	Branch passenger: Conductors, per month Baggagemen, per month Brakemen, per month		********	\$115. 69. 69.	00	.24. 20 75. 90 76. 88	8:	110.00		\$105.00	\$113.40

<sup>&</sup>lt;sup>1</sup> Through freight rates, 2.67 cents per mile.

<sup>&</sup>lt;sup>2</sup> Through freight rates, 3 cents per mile.

### Rates of pay of conductors and trainmen—Continued.

Class of employees.		Moh	awk di	vision.			awrenc ario div	
-		191	0	1913		1910		1913
Milk trains: Conductors, per mile. Minimum daily wage. Milk messengers, baggagemen, and tra mile. Minimum daily wage.	inmen, per	4. ·	0155	\$0.029 4.98 .0165 2.93		\$0.0 4.6 .0 2.7	155	\$0.029 4.98 .0165 2.93
Class of employees.	Through a ular fro	and irreg- eight.	up	freight: F and d		t		onstruc- d wreck vice.2
	1910	1913	1910	19	13	1	910	1913
Freight service: Conductors, per mile. Flagmen, per mile. Brakemen, per mile.	Cents. 3. 63 2. 525 2. 42	Cents. 4 2.67 2.67	Cent 3.9 2.8 2.7	375	ats. 4.5 3 3		ents. 3. 63 2. 525 2. 5	Cents. 4 2.67 2.67
. Class of small small		Grou	ap 1.	Gro	up 2.		Gro	up 3.
Class of employees.		1910	1913	1910	191	13	1910	1913
Yard rates: Day conductors, per hour. Day brakemen, per hour. Night conductors, per hour. Night brakemen, per hour.			Cents. 38 35 40 37	36 33	Cen	37 34 39 36	Cents. 35 32 37 34	Cents. 36 33 38 38

<sup>1</sup> Including mine service in 1913.

<sup>1</sup> Including mine service in 1913.
<sup>2</sup> Including ballast and filling service in 1910 and snowplow and circus-train service in 1913.
Specified runs.—Trains running between the following points are local pick-up and drop trains with the increase of 1913 over 1910 shown in above columns: East Rochester and Canandaigua, East Rochester and Charlotte, East Rochester and Fairport, East Buffalo and Oakfield, East Buffalo and Suspension Bridge, Depew special, De Witt and Syracuse, De Witt and Auburn, Lyons and Auburn via Geneva, Frankfort and New York Mills, Troy and Renesselaer; Troy, Green Island, Cohoes, and B. & M. yard; Utica and Broad Street, Weehawken and Cornwall, Weehawken and Kingston, Kingston and New Paltz, Kingston and Ravenna, Ravenna and Albany, Ravenna and Newburgh, Weehawken and Newburgh, and Congers ice train. ice train.

#### NEW YORK, CHICAGO & ST. LOUIS RAILROAD CO.

On this railroad the increase to passenger conductors growing out of the award of the arbitration board, averaged on the basis of specified runs, was 8.0 per cent; to passenger brakemen, 4.3 per

cent; and to baggagemen, 3.8 per cent.

In through-freight service conductors and brakemen had their rates of pay advanced 10 per cent, and in local and pick-up freighttrain service conductors were allowed an increase of slightly more than 13 per cent, and brakemen an advance of slightly more than 11 per cent.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Cond	uctors.			Brake	men.		Baggagemen.			
Class of service.	Ra	ite.	Iner	ease.	Ra	ite.	Incr	ease.	Ra	ite.	Incr	ease.
	0161	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	0161	1910 1913 Amount.	Per cent.	
Passenger: Average rate for specified runs Through freight: Average rate for specified runs Pick-up rates: Average rate for specified runs Local freight rates: Average rate for specified runs Work-train rates: All divisions	\$5. 25 4. 64 5. 06 4. 04 3. 70	\$5. 67 5. 10 5. 74 4. 57 4. 00	\$0.42 .46 .68 .53	8. 0 10. 0 13. 4 13. 1 8. 1	\$3.03 3.09 3.45 2.74 2.65	\$3. 16 3. 40 3. 83 3. 05 2. 67	\$0. 13 . 31 . 38 . 31 . 02	4.3 10.0 11.0 11.3 0.8	\$3.20	\$3.32	\$0.12	3.8

		Fore	men.		Helpers.				
Class of service.	Rate.		Increase.		Rate.		Increase.		
Canada da des 1200	1910	1913	Amount.	Per cent.	0161	1913	Amount.	Per cent.	
Yard: Average rate, day and night, for— Buffalo, Conneaut, Cleveland, Bellevue, and Fort Wayne, per hour. Chicago, per hour. Erie and Fostoria, day only, per hour.	\$0.38 .38	\$0.39 .40	\$0.01 .02	2. 6 5. 3 2. 8	\$0.35 .35	\$0.36 .37	\$0.01 .02	2.8 5.7 3.0	

### Rates of pay of conductors and trainmen.

Runs.	Mileage.		Conductors.		Brakemen.		Baggage- men.		Overtime after—	
	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913
Passenger: Buffalo to Bellevue or reverse. Bellevue to Chicago or reverse. Cleveland to Chicago or reverse. Buffalo to Erie or reverse. Buffalo to Erie or reverse. Buffalo to Erie or reverse. Cleveland to Bellevue and return Cleveland to Dover and return. Rate for overtime per hour, all runs. Through freight: Buffalo Junction to Conneaut or reverse. Conneaut to Bellevue or reverse. Conneaut to Bellevue or reverse via South Lorain. Bellevue to West Fort Wayne or reverse. West Fort Wayne to Stony Island or reverse. Rate for overtime per hour, all runs.	248 275 340 88 184 128 114 132	248 275 88 184 128 114 132 137 124 140	\$6. 65 7. 35 4. 20 4. 90 4. 20 4. 20 4. 20 4. 20 4. 20 4. 20 4. 50 4. 50	\$7. 19 7. 98 4. 50 5. 34 4. 50 4. 50 4. 50 4. 56 5. 28 5. 94 4. 96 5. 60 4. 45	\$3. 70 4. 10 2. 55 2. 75 2. 55 2. 55 2. 55 3. 20 3. 00 3. 40 . 24	\$3. 97 4. 40 2. 55 2. 94 2. 55 2. 55 2. 55 2. 55 3. 04 3. 52 3. 96 3. 31 3. 74 30	\$3. 85 4. 25 5. 25 2. 75 2. 85 2. 75 2. 75 2. 75 2. 75	\$4.09 4.54 2.75 3.04 2.75 2.75 2.75 .275	Hours. (1) (1) (1) 10 10 10 10 11–24 13–12	Hours. 12-24 13-45 9-12 8 (2) 11-24 13-12 13-42 12-24

<sup>1 2</sup> hours more than schedule time, pro rata.

<sup>28</sup> hours on or held for duty 12 hours.

# Rates of pay of conductors and trainmen—Continued.

	Mile	eage.	Condu	ectors.	Brak	emen.		rtime	All di	ivisions ate per	s, overtime hour.		
Runs.							after (h	iours)—	Condu	ctors.	Brak	emen.	
	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913	
Pick-up rates: Buffalo Junction to													
Conneaut or reverse	114	114	\$4.55	<b>\$</b> 5. 13	\$3.10	\$3.42	11-24	11-24	1				
vue or reverse Bellevue to West	132	132	5. 25	5.94	3.55	3.96	13-12	13-12					
Fort Wayne or reverse	124	124	4. 90	5.58	3.35	3.72	12-24	12-24	\$0.395	\$0.45	\$0.27	\$0.30	
to Stony Island or reverse	140	140	5.55	6.30	3.80	4. 20	14	14			r		
Buffalo Junction to Conneaut or re- verse Buffalo Junction to	114	114	4. 55	5.13	3.10	3.42	10	11. 24					
Brockton and re- turn	96	96	3.975	4.50	2.70	3.00	10	10					
neaut or reverse Cleveland to Con-	65	65	3.975	4.50	2.70	3.00	10	10			-		
neaut or reverse Cleveland to Belle-	68	68	3.975	4.50	2.70	3.00	10	10					
vue or reverse Bellevue to Leipsic	64	64	3.975	4.50	2.70	3.00	10	10	395	. 45	. 27	.30	
Junction or reverse.  Leipsic Junction to	62	62	3.975	4.50	2.70	3.00	10	10					
West Fort Wayne or reverse Fort Wayne to Knox	62	62	3.975	4.50	2.70	3.00	10	10			•		
or reverse Knox to Stony Is-	80	80	3.975	4.50	2.70	3.00	10	10					
land or reverse Work train rates, all di-	61	61	3.975	4.50	2.70	3.00	10	10	)				
visions, per day		• • • • • •	3.70	4.00	2.65	2.67	10″		.37	.40	. 26	. 267	

	Rate per hour.										
Yard service.	Day foremen.		Night foremen.		Day helper.		Night helper.				
	1910	1913	1910	1913	1910	1913	1910	1913			
Buffalo. Conneaut Cleveland Bellevue	\$0.37	\$0.38	\$0.39	\$0.40	\$0.34	\$0.35	\$0.36	\$0.37			
Fort Wayne Chicago Erica Fostoria	38 .36	.38	.40	.40	.35	.35	.37	.37			

NEW YORK, NEW HAVEN & HARTFORD RAILROAD CO., NEW YORK, ONTARIO & WESTERN RAILWAY CO., AND PHILADELPHIA & READING RAILWAY CO.

The tables for the three roads next submitted show no variations from the usual increases resulting from the award of the arbitration board, and consequently require no comment.

### NEW YORK, NEW HAVEN & HARTFORD RAILROAD CO.

		Condu	ictors.		Assistant conductors and ticket collectors.					
Class of service.	Rat	te.	Incre	ase.	Ra	ite.	Increase.			
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Passenger:										
Standard, steam and elec- tric, per mile	\$0.0268	\$0.029	\$0.0022	8. 2	\$0.0215	\$0.023	<b>80.0015</b>	7.0		
enger trainmen, monthly guaranty	125.00	125.00	.00	.0	100.00	100.00	.00	.0		
Freight: Through and irregular, per mile. Local or pick-up, per mile. Work, construction, snow-	.0363	.04	.0037							
plow, or wrecking trains, per mile	. 0363	.04	.0037	10.2						
Yard: 10 hours—										
Average rate, day and night, per hour.	.38	.39	.01	2.6						
8 hours— First trick, per day. Second trick, per day. Third trick, per day.	3.04	3. 04 3. 12 3. 20	.08 .08 .08	2.7 2.6 2.6						

		Bagga	gemen.		Brakemen.					
Class of service.	Rat	te.	Incre	ase.	Ra	te.	Increa	ase.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Passenger: Standard, steam and electric, per mile Regularly assigned pass-	<b>\$0.0155</b>	\$0.0165	\$0.001	6.5	\$0.015	\$0.016	\$0.001	6.7		
enger trainmen, monthly guaranty Freight: Through and irregular,	75. 00	77.35	2.35	3.1	70.00	72.35	2.35	3.4		
per mile					.0242	.0267	.0025	10. 3 11. 1		
Yard: 10 hours— Average rate, day and					.0242	.0267	.0025	10.3		
night, per hour  8 hours— First trick, per day Second trick, per day Third trick, per day					2. 72 2. 80 2. 88	2.80 2.88 2.96	.01 .08 .08	2.9 2.9 2.9 2.8		

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

		Flag	men.		Switchmen.					
Class of service.	Rat	te.	- Incre	ase.	Ra	ite.	Incre	ase.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.		
Freight:  Through and irregular, per mile. Local or pick-up, per mile. Work, construction, snowplow, or wreeking trains, per mile. Yard: 10 hours— Average rate, day and night, per hour. 8 hours— First trick, per day. Second trick, per day. Third trick, per day.	.02525	.0267		5. 7 7. 1 5. 7	<b>\$</b> 0. 35	\$0.36 2.80 2.88 2.96	\$0.01 .08 .08 .08	2. 9 2. 9 2. 9 2. 8		

# Rates of pay of conductors and trainmen.

	oj pag oj					
Class of service	e.		Condu	ctors.	Assistant c	
			1910	1913	1910	1913
Passenger: Standard, steam and electric, I Minimum mileage allowance, I Regularly assigned passenger guaranty. Freight: Through and irregular, per mil Local or pick-up, per mile Work, construction, snow-plov per mile Overtime: Passenger, per hour. Through freight: Work, construction wrecking trains, per hour Local or pick-up freight, per hour	trainmen, le w or wreckin	monthly ng trains, -plow, or	\$0.0268 157 125.00 .0363 .03975 .0363 .42 .363 .3975	\$0.029 1 155 125.00 .04 .045 .04 .45		
Class of service.	Bagga	gemen.	Fla	gmen.	Brake	men.
Class of service.	1910	1913	1910	1913	1910	1913
Passenger: Standard, steam and electric, per mile Minimum mileage allowance, per day Regularly assigned passenger	\$0. 0155	\$0.0165		\$0.016	\$0.015	\$0.016
trainmen; monthly guaranty.  Freight: Through and irregular, per mile  Local or pick-up. per mile  Work, construction, snow-plow, or wrecking trains, per	75. 00	77. 35	\$0. 02525 . 028	72. 35 . 0267 . 03	70.00 .0242 .027	72. 35 . 0267 . 03
overtime: Passenger, per hour Through freight: Work, construc-		. 275	. 02525	. 0267	.0242	. 0267
tion, snow-plow, or wreck- ing trains, per hour			. 2525 . 28	. 267 . 30	. 242	.267

#### RAILROAD LABOR ARBITRATIONS.

### Rates of pay of conductors and trainmen—Continued.

Yard service.	Condu	ictors.	Swite	hmen.	Brakemen.	
I ard service.	1910	1913	1910	1913	1910	1913
10 hours: Day, per hour. Night, per hour. 8 hours: First trick, per day. Second trick, per day. Third trick, per day.	2. 96 3. 04	\$0.38 .40 3.04 3.12 3.20	\$0. 34 . 36 2. 72 2. 80 2. 88	\$0.35 .37 2.80 2.88 2.96	\$0.34 .36 2.72 2.80 2.88	\$0. 35 . 37 2. 80 2. 88 2. 96

Note.—Increases in 1913 over 1910 for services not specified are shown in article E of the award in terms of percentages.

#### NEW YORK, ONTARIO & WESTERN RAILWAY CO.

Class of employees.	Passenger, per mile.		Incr	ease.	Through and irregular freight, work, wreek, construction, and snowplow, per mile.		Increase.		
	1911	1914	Amount.	Per cent.	1911	1914	Amount.	Per cent.	
Conductors Baggagemen Flagmen or rear trainmen Trainmen	\$0.0268 .0155		\$0.0022 .001	8. 2 6. 5	\$0.0363 .02525	\$0.04 .0267	\$0.0037 .00145	10. 2	
Class of employees.	Passenger, per day.		Increase.		Local or pick-up, per mile.		Increase.		
6	1911 1	1914 2	Amount.	Per cent.	1911	1914 3	Amount.	Per cent.	
Conductors Baggagemen Flagmen of rear trainmen Trainmen	\$4. 20 2. 75 2. 55	\$4. 50 2. 75 2. 55	\$0.30 .00	7. 1 0. 0	\$0.03975 .028	\$0.045	\$0.00525 .002	13.2	
Class of employees.	Milk train, per day.		Increase.		Yard service, per day.		Increase.		
	1911	1914	Amount.	Per cent.	1911	1914	Amount.	Per cent.	
Conductors. Flagmen (through milk). Flagmen (local milk). Trainmen (through milk). Trainmen (local milk). Yard conductors: Day. Night	\$3. 93 2. 52 2. 65 2. 42 2. 55		\$0.40 .16 .26 .26 .26	10. 2 6. 4 9. 8 10. 7 10. 2			\$0. 10 10	2.9	
Yardmen: Day Night					3. 20 3. 40	3. 30 3. 50	.10	3.1 2.9	

Any excess of mileage over 150 miles per day paid at mileage rates.
 Applicable only to runs of less than 155 miles per day.
 Runs of 100 miles or less, either straightaway or turn around, paid for as 100 miles.

Class of employees.	Passenger	, per mile.	Passenger	, per day.	Through and irreg- ular freight, work, wreck, construc- tion, and snow- plow per mile.		
	1911	1914	1911 1	1914 2	1911	1914	
Conductors Baggagomen Flagmen or rear trainmen Trainmen Brakemen	\$0.0268 .0155	\$0.029 .0165 .016 .016	\$4.20 2.75 2.55	\$4.50 2.75 2.60 2.55	\$0. 0363 . 02525 . 0242	. 0267	
Class of employees.		pick-up, mile.		train, day.	Yard service, per day.		
	1911	1914 8	1911	1914	1911	1914	
Conductors Flagmen or rear trainmen Trainmen Brakemen	. 028	\$0.045 .03 .03	\$3.93				
Flagmen (through milk). Flagmen (local milk). Trainmen (through milk). Trainmen (local milk).			2. 52 2. 65 2. 42 2. 55	2. 68 2. 91 2. 68 2. 81			
Yard conductors: Day Night Yardmen:					\$3.50 3.70	\$3.60 3.80	
yaramen: Day Night					3. 20 3. 40	3, 30 3, 50	

Any excess of mileage over 150 miles per day paid at mileage rates.
 Applicable only to runs of less than 155 miles per day.
 Runs of 100 miles or less either straightaway or turn around paid for as 100 miles.

#### PHILADELPHIA & READING RY. CO.

	Conductors.				Baggagemén.				Flagmen or rear brakemen.			
Class of service.	Rate.		Increase.		Rate.		Increase.		Rate.		Increase.	
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Runs of 155 miles or over, per mile Runs of less than 155 miles, per day	\$0.0268	\$0.029	\$0.0022 .30	8. 2 7. 1	\$0. 0155 2. 75	\$0. 0165 2, 75	\$0.001 .00	6.5	<b>\$</b> 0. 0152	\$0.016	<b>\$0.0008</b>	5. 3
Freight: Through and irregular, work, construction, wreck train, etc., per mile	. 0363	. 04	. 0037	10 2								
Local-freight service, per mile Yard: Average rate for groups 1 and 2, day and night, per hour	. 365	. 045		13. 2 2. 7						•••••		

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

		Bral	kemen.		Flagmen.				
Class of service.	Rate.		Increase.		Ra	ite.	Increase.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger: Runs of 155 miles or over, per mile. Runs of less than 155 miles, per day. Freight: Through and irregular, work, construction, wreck train, etc., per mile. Local-freight service, per mile Yard: Average rate for groups 1 and 2, day and night, per hour.	\$0.015 2.55 .0242 .027	\$0.016 2.55 .0267 .03	\$0.001 .00 .0025 .003	6.7 .0 10.3 11.1		\$0. 0267 . 03	\$0.00145 .002	5. 7 7. 1	

# Rates of pay of conductors and trainmen.

Class of employees.		155 miles per mile.		of less 5 miles, day.		me, per ur.	passeng men,	Regularly assigned passenger trainmen, monthly guaranty.	
	1910	1913	1910	1913	1910 1	1913	1910	1913	
Passenger: Conductors Assistant conductors Baggagemen. Flagmen and rear brakemen Through and irregular freight, work, construction, wreck train, etc.: Conductors Flagmen Brakemen Local freight service: Conductors Flagmen Brakemen Local freight service: Conductors Flagmen Brakemen Brakemen Brakemen Brakemen	\$0.0268 .0155 .0152 .015 .0363 .02525 .0242 .03975 .028 .027	\$0.029 .023 .0165 .016 .016 .04 .0267 .0267 .0265 .03	\$4.20 2.75 2.55		\$0.42 .25 .24	\$0.45 .357 .275 .26 .25			

	Rate per hour.							
Class of employees,	Grou	ıp 1.	Group 2.					
	1910	1913	1910	1913				
Yard service: 3 Day conductors. Day brakemen. Night conductors. Night brakemen.	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	\$0.35 .32 .37 .34	\$0.36 .33 .38 .35				

<sup>1</sup> On short turn-around runs no single trip of which exceeds 80 miles. Overtime on runs of 155 miles per

day or over on basis of 20 miles per hour.

2 Overtime, 1910-1913: On runs of 100 miles or less, overtime paid for all time in excess of 10 hours, and on runs of over 100 miles overtime paid for the time used in excess of the time necessary to complete the trip at an average speed of 10 miles per hour.

3 Ten hours or less constitute a day. Overtime pro rata. In computing overtime actual time used.

Note.—Increases in 1913 over 1910 for services not specified are shown in Article E of the award in terms of percentages.

## RUTLAND RAILROAD CO.

As a result of the arbitration award passenger conductors on the Rutland Railroad had their rates of pay advanced by amounts ranging from 7.1 to 8.2 per cent of the rates in effect before the award. In freight service increases of from 10.2 to 13.2 per cent were granted.

In freight service increases of from 10.2 to 13.2 per cent were granted. Increases in rates of pay in passenger service, in the case of baggagemen ranged from 6.4 to 6.5 per cent, and in the case of brakemen amounted to 6.7 per cent. Brakemen employed in through freight service received an increase of 10.3 per cent, and in local freight service an increase of 11.1 per cent.

Yardmen on this road received the usual increase of 1 cent per

hour.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	ictors.		Baggag	emen.
Class of service.	Rat	e.	Incre	ase.	Rat	e.
	1910	1913	Amount.	Per cent.	1910	1913
Passenger: Runs of 155 miles or over, per mile. Runs of less than 155 miles, per day. Regularly assigned passenger and milk train employees, monthly guaranty. Freight: Through and irregular freight, per mile. Way freight, per mile. Yard: Average, Rutland yard, day and night, per hour. Average all other yards, day and night, per hour.	\$0.0268 4.20 115.00 .0363 .03975 .37	\$0.029 4.50 124.43 .04 .045 .38 .37	\$0.0032 .30 9.43 .0037 .00525 .01	8. 2 7. 1 8. 2 10. 2 13. 2 2. 7 2. 8	\$0.0155 2.75 70.00	
	Baggag	emen.		Brake	emen.	
Class of service.	Incre	ase.	Rat	e.	Incre	ase.
	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Runs of 155 miles of over, per mile. Runs of less than 155 miles, per day. Regularly assigned passenger and milk train employees, monthly guaranty  Freight: Through and irregular freight, per mile.	\$0.001 .00 4.48	6.5	\$0.015 2.55 65.00	\$0. 016 2. 55 69. 35	\$0.001 .00 4.35	6.7 .0 6.7
Way freight, per mile			. 027	. 03	. 003	2.9

# Rates of pay of conductors and trainmen.

Passenger service.	Runs of or over,	155 miles per mile.	Runs of le 155 miles,		than day. Overtime per hour.				passen milk ployees	Regularly assigned passenger and milk train em- ployees, monthly guaranty.	
	1910	1913	1910	1913	19	910	191	3	1910	1913	
Conductors Baggagemen Brakemen	\$0.0268 .0155 .015	\$0.029 .0165 .016	\$4.20 2.75 2.55	\$4.50 2.75 2.55	:	\$0.42 .25 .24		45 275 255	\$115.00 70.00 65.00	\$124.43 74.48 69.35	
Freight service.						nd irre per mi		w	ay freight,	per mile.	
				1910	1910		913		1910	1913	
Conductors Brakemen					0363	\$(	0.04	8	80.03975 .027	\$0.045 .03	
	Yard se	rvice 1			Ru	tland ho	yard, j ur.	per		yards, per ur.	
	2 64 4 50	. 7 2001			19	910	191	3	1910	1913	
Day conductors Day brakemen Night conductors Night brakemen						\$0.36 .33 .38 .35		.37 .34 .39	\$0.35 .32 .37	\$0.36 .33 .38	

<sup>1</sup> Ten hours or less constitute a day; overtime paid pro rata on the basis of actual minutes.

## TOLEDO & OHIO CENTRAL RAILWAY CO.

The increases in rates of pay resulting from the application of the arbitration award by this railroad were approximately the same as those shown for the roads preceding.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Cond	luctors.		Baggagemen.				
Class of service.	Ra	ite.	Incre	ase.	Ra	ite.	Incre	Increase.	
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger mileage runs, Columbus and Charleston, per mile Through freight, per mile Yard, average rate, day and night: Toledo, Columbus, Corning, and Chauncey, per hour Bueyrus, per hour.	\$0.0268 .0365	\$0.029 .04	\$0.0022 .0035	8. 2 9. 6 2. 6 2. 7			\$0.00		
Kent and Findlay, per hour Other service: Locals, per day	. 355	.365	. 50	2. 8					
Mine runs and roustabout, per day	3.70	4.50	.80	21.6					
day	3, 65	4.00	. 35	9.6					

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913—Continued.

		Bra	kemen.		Flagmen.				
Class of service.	Ra	Rate. Increase. Rate.			ite.	Increase.			
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger mileage runs, Columbus and Charleston, per mile Through freight, per mile Yard, average rate, day and night: Toledo, Columbus, Corning and Chauncey, per hour Bucyrus, per hour	\$0.015 .0245	\$0.016 .0267	\$0.001 .0022	6.7 9.0 2.9 3.2	\$0.0255	\$0.0267	\$0.0012	4.7	
Kent and Findlay, per hour  Other service: Locals, per day	. 305 2. 70	3.00	.01	3.3	2.80	3.00	.20	7.1	
Mine runs and roustabouts, per day	2. 50 2. 45	3.00 2.67	.50	20. 0 9. 0	2. 55 2. 55	3.00 2.67	.45	17. 6 4. 7	

# Rates of pay of conductors and trainmen.

Mileage runs, passenger service.	Miles.	Conducte mi		Baggage: mi	men, per	Brakem mi	
		1910	1913	1910	1913	1910	1913
Toledo to Columbus, one wáy ¹ Columbus to Charleston Columbus to St. Marys, r. t. ³. Toledo to Thurston, r. t. ³. Toledo to Bucyrus, r. t. ³. Regularly assigned passenger-	133 204 188 296	\$0.0268 .0268 125.00 125.00 125.00	<sup>2</sup> \$4.50 .029 .029 .029 .029 <sup>2</sup> 4.50	\$0.0165 .0165 75.00 75.00 75.00	<sup>2</sup> \$2.75 .0165 .0165 .0165 <sup>2</sup> 2.75	\$0.015 .0150 70.00 70.00 70.00	<sup>2</sup> \$2.55 .016 .016 .016 <sup>2</sup> 2.55
train men; monthly guaranty		.42	135.00 .45	.25	82.50 .275	.24	<sup>5</sup> 76.50

1910 1913 1910 1913 1910 1913	Through-freight service.	Condu	etors.	Brake	emen.	Flagi	men.	Overtime.	
Rate per mile \$0.0365 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Through-freight service.	1910	1913	1910	1913	1910	1913	Overtime.	
	Rate per mile Overtime 4							(10 miles per hour.)	

Through-freight mileage allowed.	Whit- more of Bucy- rus via H. V.	bus via	Corn- ing.	Thurston and return.	Whit- more.	Fos- toria and re- turn.		Find- lay and return.	St. Marys.	Bucy- rus and return.
Columbus	122									
West Columbus		100	100	100 100	128	100	117	173	100	
Bucyrus Whitmore			115		100	100 100				134

<sup>1</sup> Rates for 1910 computed on basis of mileage rate of \$0.0268 for conductors, \$0.0165 for baggagemen, and \$0.015 for brakemen.

2 Rate per day.

3 1910 figures show rate per month.

4 Rate per hour.

5 Rear trainmen \$78 per month.

Note.—Increases in 1913 over 1910 for services not specified are shown in article  ${\bf E}$  of the award in terms of percentages.

# WESTERN MARYLAND RAILWAY CO.

The table for the road next submitted shows no variation from the usual increases resulting from the award of the arbitration board, and consequently requires no comment.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	ctors.			Baggag	emen.	
Class of service.	Rat	e.	Increa	se.	Rat	e.	Increase.	
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger, regularly assigned trainmen, monthly guaranty: Class A. Class B <sup>1</sup> Regularly assigned trainmen called to service in addition to regular runs: <sup>2</sup> 1 hour or less. Over 1 hour and 5 hours or less Over 5 hours or less than 10 hours. Freight, through and irregular, work, construction, or wrecking	\$125.00 115.00 .42 2.10 4.20	\$135. 00 135. 00 45 2. 25 4. 50	. 03 . 15	8. 0 17. 4 7. 1 7. 1 7. 1		. 275	\$7.50 13.50 .035 .18	10. 0 19. 6 14. 6 15. 0 3. 8
train service: Class A, per mile Class B, per mile Local, pick-up, or drop service: Class A, per day. Class B, per day Yard, average rates for groups 1, 2, and 3, day and night, per hour.	. 0363 . 035 3. 975 3. 85	. 04 . 04 4. 50 4. 50	. 65	14. 3 13. 2 16. 9				

		Brake	men.		Flagmen.				
Class of service.	Rat	te.	Increa	se.	Rat	e.	Increase.		
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.	
Passenger, regularly assigned trainmen, monthly guaranty: Class A Class B <sup>1</sup> Regularly assigned trainmen called to service in addition to regular runs: <sup>2</sup> I hour or less. Over 1 hour and 5 hours or less Over 5 hours or less than 10	. 24 1. 20	\$76. 50 76. 50	\$6.50 12.50	19. 5 6. 3					
hours.  Freight, through and irregular, work, construction, or wrecking train service:	2. 55	2. 55	.00						
Class A, per mile	. 0242					\$0.0267 .0267	\$0.00145 .0022	5. 7 9. 0	
Class A, per day	2.70 2.60	3. 00 3. 00	.30	11.1 15.4		3.00 3.00	. 20	7. 1 11. 1	
2, and 3, day and night, per hour.	. 34	. 35	. 01	3.0		• • • • • • • • • • • • • • • • • • • •			

Rates shown for Class B obtain until completion of connection between Western Maryland Ry. and the Pittsburgh & Lake Erie R. R., after which Class A rate will obtain.
 Service in excess of 100 miles not considered emergency work as in the meaning of this rule.

# Rates of pay of conductors and trainmen.

•	19	10		1913	Regula train guara		me	gned	Overt	ime (p	er hour	\$0. 45 31 275 255 255 367 367 377 387 387 387 387 380 380 380 380 380 380 380 380
Class of employees.	Per	mile.	Run of 15 mile or over	than 158 miles, mini- mum	19	10		1913	. 1	910	191	13
	Class A.	Class B1	(per mile		Class A.	Class	Bı		Class A	Class	Bı	
Passenger: Conductors Baggagemen (milk). Baggagemen Brakemen Assistant conductors. Flagmen or rear brakemen.	\$0. 0268 . 016 . 0155 . 015	\$0, 025 . 015 . 0145 . 014	\$0.029 .016 .016 .023	35 2. 75 3 2. 55 3 3. 57	\$125.00 80.00 75.00 70.00	\$115. 73. 69. 64.	00	82. 50 76. 50 78. 00	\$0.42 .26 .25 .24	.:	25 24 24 	. 31 . 275 . 255 . 357
	Regular					rainn egula			service	e in ad	dition t	0
Class of employ	ees.			1910					191	3		
		1 hou		Over 1 hou and 5 hour or less.		or		nour or less.	and 5 h	and 5 hours less		or an
Passenger: 2 Conductors Baggagemen Brakemen			80. 42 . 24 . 24	\$2.10 1.20 1.20	)	4. 20 2. 65 2. 55		\$0. 45 . 275 . 255 . 255 1. 38 . 255			2	2.75
		wor	k, cor	and irregulation, ice, per mi	or wrecl		Lo	cal freig	ht; picl	c-up or day.	drop se	erv-
Class of service	ee.		19:	10	191	2		19	)10		1012	
		Class	s A.	Class B.1	151		Cl	ass A.	Class	B.1	1915	
Conductors         \$0.0363           Flagmen         .02525           Brakemen         .0242			2525	\$0.035 .0245 .0235		04 0267 0267	-	\$3.975 2.80 2.70		3. 85 2. 70 2. 60	9	3.00
Yard service,			-	a	1910 ³					913 4	La	
Day conductors Day brakemen Night conductors Night brakemen				\$0.37 .34 .39 .36	\$0.36 .33 .38 .35	-	**************************************	5 \$0	p 1. Gr 0.38 .35 .40 .37	\$0.37 .34 .39 .36	-	

## VANDALIA RAILROAD CO.

On all divisions of this railroad the advance in minimum daily rates of pay to passenger conductors as the result of the arbitration award was 7.1 per cent. Freight conductors in irregular freight

<sup>&</sup>lt;sup>1</sup> Rates shown for Class B obtain until completion of connection between Western Maryland Ry. and the Pittsburgh & Lake Erie R. R., after which Class A rate obtains.

<sup>2</sup> Service in excess of 100 miles not considered emergency work.

<sup>3</sup> 10 hours or less constitute a day's work, overtime not commencing until after the expiration of 30 minutes in addition thereto, the 30 minutes reckoned as 1 hour.

<sup>4</sup> 10 hours or less constitute a day's work. Overtime paid pro rata on basis of actual minutes worked or held for days. held for duty.

Note.—Increases in 1913 over 1910 for services not specified are shown in Article E of the award in terms of percentages.

service received an increase of 10.2 per cent. In the case of work and wreck train service, neither conductors nor brakemen secured

any advances in rates of pay.

On the St. Louis, Vincennes, Michigan, and Peoria divisions, brakemen in irregular freight service had their rates of pay increased slightly more than 10 per cent. The rates of pay in work and wreck train service were unchanged by the arbitration award. The increases in rates of pay allowed to yardmen ranged from 1.6 to 2.9 per cent. The trip rate for mixed trains between Decatur and Peoria was made 10 per cent higher for conductors and 10.3 per cent more for baggagemen and brakemen.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration effective Nov. 10, 1913.

		Conduc	tors.			Baggag	emen.	
Class of service.	Ra	ite.	Increa	se.	Ra	ite.	Increa	se.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
St. Louis division: Passenger; minimum allowance, per day Freight—	1 \$4. 20	\$4.50	\$0.30	7.1	182.75	\$2.75	€0.00	0.0
Through and irregular, per mile Piloting train, per hour. Work and wreck trains,	<sup>2</sup> .0363	.04	.0037	10.2				
yard: average rates for	. 45	. 45	.00	.0				
groups 1, 2, 3, 4, and 5, day and night, per hour Vincennes division and Indianapolis Terminal division: Passenger—	.382	.388	. 006	1.6		•••••		
Minimum allowance, per day Irregular runs, per mile . Indianapolis and Vin-	1 <b>4.</b> 20 . 0268	4.50 .029	.30	7.1 8.2	1 2.75 .0155	2.75 .0165	.00	.0 6.5
cennes, per round trip  Freight—	7.42	7.42	.00	.0	4. 20	4. 20	.00	.0
Irregularruns, per mile. Piloting trains, per	. 0363	.04	. 0037	10.2				
hour	. 50	. 50	.00	.0				
per hourYard; average rates for	. 45	. 45	.00	.0				
groups 1, 2, and 3, day and night, per hour  Michigan division:	.3767	. 3833	. 0066	1.8				
Passenger; minimum allow- ance, per day Freight—	1 4. 20	4.50	.30	7.1	1 2.75	2.75	.00	.0
Through and irregular, per mile Piloting trains, per	<sup>2</sup> .0363	.04	. 0037	10.2				
hour	. 50	. 50	.00	.0				
yard service; average rates	. 45	. 45	.00	.0				
for groups 1 and 2, day and night, per hour  Peoria division:	.38	. 39	.01	2.6				
Passenger; minimum allow- ance, per day	1 4. 20	<sup>3</sup> 4. 50	.30	7.1	1 2.75	3 2.75	.00	.0
Through and irregular, per mile Piloting trains, per	<sup>2</sup> .0363	.04	.0037	10. 2				
hour	. 50	. 50	.00	.0				
per hour	. 45	. 45	.00	.0				
Yards; average rates, day and night—	5, 38	5. 92	. 54	10.0	3.02	3.33	.31	10.3
Decatur yard, per hour. Paris yard, per hour	.37	.38	.01	2.7 2.7				

<sup>&</sup>lt;sup>1</sup> Irregular service. <sup>2</sup> Irregular freight service, 1910. <sup>3</sup> Passenger runs of less than 155 miles per day.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration effective Nov. 10, 1918—Continued.

	-1	Brakem	ien.			Flagn	nen.	
Class of service.	Ra	te.	Increas	se.	Ra	te.	Increa	se.
	1910	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
St. Louis division:  Passenger; minimum allow- ance, per day  Freight—	1 \$2.55	\$2.55	\$0.00	0.0	• • • • • • • • • • • • • • • • • • • •			
Through and irregular, per mile	2.0242	.0267	.0025	10.3				
Piloting trains, per	.50	.50	.00	.0				
work and wreck trains,								
per hour	. 285	. 285	.00	.0				
groups 1, 2, 3, 4, and 5, day and night, per hour. Vincennes division and Indian-	.352	.358	.006	1.7		,		
apolis Terminal division: Passenger—			·					
Minimum allowance, per day Irregular runs, per mile.	1 2.55 .015	2.55 .016	.00	6.7				
Indianapolis and Vin- cennes, per round trip.	3.96	3.96	.00	.0				
Freight— Irregular runs, per mile. Piloting trains, per hour	.0242	.0267 .50	.0025	10.3	\$0.0253	\$0.0267	\$0.0014	5.5
Work and wreck trains, per hour	. 285	. 285	.00	.0	. 285	. 285	.00	.0
groups 1, 2, and 3, day and night, per hour	.3467	. 3533	. 0066	1.9				
Michigan division: Passenger; minimum allow-		0 ***						
ance, per day Freight— Through and irregular,	1 2, 55	2.55	.00	.0				
per mile Piloting trains, per	2.0242	.0267	.0025	10.3				
hour Work and wreck service,	. 50	. 50	.00	.0				
per hour	. 285	. 285	.00	.0				
for groups 1 and 2, day and night, per hour	.35	.36	.01	2.9				
Passenger; minimum allow- ance, per day Freight—	1 2. 55	<sup>3</sup> 2. 55	.00	.0				
Through and irregular, per mile Piloting trains, per	2.0242	0267	.0025	10.3				
hour	.50	. 50	.00	.0				
per hour	.285	. 285	.00	.0				
Decatur and Peoria(mixed), per round trip	2.82	3. 11	. 29	10.3				
and night— Decatur yard, per hour Paris yard, per hour		.35 .35	.01	2.9 2.9				

<sup>&</sup>lt;sup>1</sup> Irregular service. <sup>2</sup> Irregular freight service, 1910. <sup>3</sup> Passenger rnns of less than 155 miles per day.

#### MICHIGAN DIVISION.

# Rates of pay of conductors and trainmen.

	Class of employees.								Passenger service, minimum daily allowance (irreg- ular runs).			
						1910	191	.3	1910 1	1913 2		
Passenger: Conductors Baggagemen Brakemen						\$0.45 .27 .26	75 .	45 275 255	\$4. 20 2. 75 2. 55	\$4.50 2.75 2.55		
Class of employees.	Irreg- ular service (per mile).	Through and ir- regular service (per mile).		Piloting trains (per hour). Work and wreck service (per hour). Mine ser								
	1910 3	1913	1910	1913	1910	1913	1910	191	3 1910	1913		
Freight and mis- cellaneous: Conductors Brakemen	\$0.0363 .0242	\$0.04 .0267	\$0.50 .50	\$0.50 .50	\$0.45 .285	\$0.45 .285		\$0.0		\$0.045 .03		
						G	roup 1.		Gro	ıp 2.		
	Class	of employ	00S.			1910	191	13	1910	1913		
Yard service: 5 Day conductor Day brakemen Night conductor Night brakeme	ors						37 34 39 36	0.38 .35 .40 .37	\$0.37 .34 .39 .36	\$0.38 .35 .40 .37		

<sup>1</sup> On regular passenger runs, 1910, rates of pay of conductors, \$3.15 to \$5.30 per trip; baggagemen, \$1.80 to \$2.90 per trip; brakemen, \$1.74 to \$2.79 per trip.

2 Rates of pay for passenger conductors, baggagemen, and brakemen on runs of 155 miles per day or over, 2.9 cents, 1.65 cents, and 1.6 cents per mile, respectively, these rates obtaining whenever the miles made at such rates in a day amount to a greater sum than the minimum day rates.

3 On through freight runs, 1910, rates of pay, conductors, \$3.63 to \$5.60 per trip; brakemen, \$2.42 to \$3.82

per trip.
<sup>4</sup> Rates of pay local freight service, 1910, conductors, \$4.40 to \$6.23 per trip; brakemen, \$2.97 to \$4.31 per

trip.
Actual time, minimum 10 hours.

#### PEORIA DIVISION.

# Rates of pay of conductors and trainmen.

Mixed service.	passeng	ne rates, ger serv- r hour).	Pec	tur & oria, l trip.	freigh	gular t runs mile).¹		freight mile).	train	oting s (per ur).	Work wreck (per h	trains
	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913
Conductors Baggagemen	\$0.45 .275	\$0.45 .275	\$5.38 3.02	\$5, 92 3, 33	\$0.0363	\$0.04	(2)	\$0.045	\$0.50	\$0.50	\$0.45	\$0.45
Brakemen	. 255	3.255	2.82	3. 11	.0242	. 0267	(2)	. 045	. 50	. 50	. 285	. 285
								Min	imum d	laily		

allowance.4

<b>M</b> ixed service.	pa	egular ssen- runs.	Passen- ger runs of less than 155 miles per day.
Conductors 5.	-	910 \$4, 20	1913
Baggagemen <sup>5</sup> . Brakemen <sup>5</sup> .	-	2. 75 2. 55	2. 75 2. 55
Yard service.			is yard.
1910 1	.913	1910	1913

Yard service.				
	1910	1913	1910	1913
Day conductors <sup>5</sup> .  Day brakemen <sup>5</sup> .	\$0.36 .33	\$0.37 .34	\$0.36	\$0.37 .34
Night conductors 5	.38	. 39	. 38	. 39
Night brakemen <sup>5</sup>	.35	.36	.35	.36
1 Pates for 1012 gover through freight runs also. Pates of new conduction	tora thre	ouah frai	aht corri	00 1010

¹ Rates for 1913 cover through freight runs also. Rates of pay conductors, through freight service, 1910, \$3.63 to \$6.47 per trip; brakemen, \$2.42 to \$4.31 per trip.
² Local freight runs, 1910, conductors, \$4.40 to \$6.23 per trip; brakemen, \$2.97 to \$4.31 per trip.
³ Rear brakemen, 26 cents per hour.
⁴ Rates of pay passenger conductors, baggagemen, and brakemen, 1913, on runs of 155 miles per day or over, 2.9 cents, 1.65, and 1.6 cents per mile, respectively, these rates obtaining whenever the miles made at such rates in a day amount to a greater sum than the minimum day rates. Rates of pay of conductors on regular passenger runs, 1910, \$2.68 to \$5.33 per trip; baggagemen, \$1.55 to \$3.15 per trip; brakemen, \$1.50 to \$3.07 per trip. Regular passenger runs, 1910, rates of pay, conductors, \$2.68 to \$5.33 per trip; baggagemen, \$1.55 to \$3.02 per trip; brakemen, \$1.50 to \$3.07 per trip.
⁵ Actual time; minimum, 10 hours.

#### ST. LOUIS DIVISION.

# Rates of pay of conductors and trainmen.

									Irregular service.					
	Class of	employe	es.			Overtime	e, per hou			Minimum day rates.				
					-	1910	1913	19	10	19131				
Passenger: Conductors Baggagemen Brakemen						\$0.45 .275 .26	\$0. 45 . 27 . 28	5	\$4. 20 2. 75 2. 55	\$4.50 2.75 2.55				
Class of employees.	Through and ir- regular freight service permile).		g trains nour).	wrec	rk and k trains hour).		service nile).	serv	\$4.50 2.75 2.55  ccal freight rvice (per mile.)  10 1913  \$0.045 0.03  Group 5.					
	2 1910	1913	1910	1913	1910	1913	1910	1913	1910	1913				
Freight and miscellaneous: Conductors	60. 0363 . 0242	\$0. 04 . 0267	\$0.50 .50	\$0.50 .50	\$0.45 .285	\$0.45 .285		\$0.045 .03	(3) (3)					
	Gro	oup 1.	Grou	ıp 2.	Gre	oup 3.	Grou	ıp 4.	Gı	oup 5.				
Class of employees.	1910	1913	1910	1913	1910	1913	1910	1913	1910	1913				
Yard service: 4 Day conductors Day brakemen. Night conductors Night brakemen	34		\$0.37 .34 .39 .36	\$0.38 .35 .40 .37	\$0.36 .33 .38 .35	.34	\$0.38 .35 .40 .37	\$0.38 .35 .40 .37	\$0.33 .34 .44	35 .35				

<sup>1</sup> Rates of pay for passenger conductors, baggagemen, and brakemen on runs of 155 miles or over, 2.9 cents, 1.65 cents, and 1.6 cents per mile, respectively, these rates obtaining whenever the miles made at such rates in a day amount to a greater sum than the minimum day rates. Passenger service, 1910, rates of pay: Conductors, \$2.68 to \$6.62 per trip; baggagemen, \$1.55 to \$3.83 per trip; and brakemen, \$1.55 to \$3.83 per trip; and brakemen, \$1.50 to \$3.70 per trip; baggagemen, \$1.55 to \$3.83 per trip; and brakemen, \$1.50 to \$3.70 per trip; baggagemen, \$1.55 to \$3.83 per trip; and brakemen, \$1.50 to \$3.70 per trip; baggagemen, \$1.55 to \$3.83 per trip; and brakemen, \$1.50 to \$3.70 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$1.50 per trip; baggagemen, \$

of pay: Conductors, \$2.08 to \$6.02 per trip; baggarenen, \$1.30 to \$5.00 per trip.

Through freight runs in 1910: Indianapolis and Terre Haute carried rate of \$3.63 and \$2.42; Indianapolis and Effingham, \$5.16 and \$3.43; Terre Haute and East St. Louis, \$6.20 and \$4.25; Terre Haute and Effingham, \$3.63 and \$2.42; Effingham and East St. Louis, \$3.73 and \$2.45; Indianapolis and East St. Louis, preferred, \$7.80 and \$5.20 per trip, respectively, for conductors and brakemen.

Local freight runs, 1910, rates for conductors, \$4 to \$6.30 per trip; brakemen, \$2.70 to \$4.31 per trip.

Actual time: Minimum 10 hours (all yards).

#### VINCENNES DIVISION AND INDIANAPOLIS TERMINAL DIVISION.

Rates of pay of conductors and trainmen.

			Passenge	r service.					
Class of employees.	Passenge time ra hour).	r over- ates (per	Irregular runs; minimum daily allow- ance.	Minimum day rates.	Irregular ger ru mile).		Round trip be- tween Indianapo- lis and Vin- cennes(perround trip).		
	1910	1913	1910	1 1913	1910	1913	1910	1913	
Passenger: Conductors Baggagemen Brakemen	\$0.45 .275 .255	\$0.45 .275 .26	\$4. 20 2. 75 2. 55	\$4, 50 2, 75 2, 55	\$0.0268 .0155 .015	\$0.029 .0165 .016	\$7.42 4.20 3.96	\$7.42 4.20 3.96	
Class of employees.	Irregular freight runs (per mile).			g trains nour).	Work an trains (p	nd wreck er hour).	Local freight (per mile).		
	1910	2 1913	1910	1913	1910	1913	1910	1913	
Freight and miscel- laneous: Conductors Flagmen Brakemen.	\$0.0363 .0253 .0242	\$0.04 .0267 .0267	\$0.50 .50 .50	\$0.50 .50	\$0.45 .285 .285	\$0.45 .285 .285	(3)	\$0.045 .03	
Class of en	Class of employees.			(rate per ur).		(rate per our).	Group 3 (rate per hour).		
Cambo of Chaptoy Coo.		1910	1913	1910	1913	1910	1913		
Yard service: 4 Day conductors Day brakemen Night conductors Night brakemen			\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	\$0.38 .35 .40 .37	\$0.38 .35 .40 .37	

<sup>1</sup> On runs of 155 miles per day or over the pay of passenger conductors, baggagemen, and brakemen: 2.9 cents, 1.65 cents, and 1.6 cents per mile, respectively, these rates to obtain whenever the miles made at such rates in a day amount to a greater sum than the minimum day rates. Rates of pay passenger service, 1910: Conductors, \$2.68 to \$6.62 per trip; baggagemen, \$1.55 to \$3.83 per trip; brakemen, \$1.50 to

<sup>\$8.77</sup> per trip.

2 Rates given for 1913 also apply to through freight. Through freight runs in 1910, Indianapolis and Vincennes, carried rates per trip of \$4.43, \$2.95, and \$3.08; Indianapolis and Bushrod, \$3.63, \$2.42, and \$2.53; Indianapolis and Bicknell, \$3.85, \$2.57, and \$2.68, respectively, for conductors, brakemen, and

Rates of pay local freight service, 1910: Conductors, \$4.40; brakemen, \$2.97; and flagmen, \$3.08 per trip.
 Actual time, minimum, 10 hours.

WHEELING & LAKE ERIE RAILROAD CO., WABASH-PITTSBURGH TERMINAL RAILWAY CO., WEST SIDE BELT RAILROAD CO.

The comparison of rates of pay as set forth in the following table shows practically the same increases as those mentioned in the award of the arbitration board for the different classes of service.

The comparatively larger increase in mine-run service, amounting to 16 per cent, was allowed by the board on the ground of increased

productivity of trainmen engaged in this branch of work.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

		Condu	luctors. Brakemen.						
Class of service.	Rat	te.	Incre	ase.	Ra	ite.	Ine	crease.	
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.	
Passenger: Standard, per mile 1 Regularly assigned train-	\$0.0268	\$0.029	\$0.0022	8.2	\$0.015	\$0.016	\$0.001	6.7	
men monthly guaran- tee	125.00	135.00	10.00	8.0	70.00	76.50	6.50	9.3	
mum allowance for each day used, per day Freight:	4. 20	4.50	.30	7.1	2. 55	2. 55	.00	.0	
Through and irregular, per mile 2  Way freight pick-up or	. 0363	. 04	.0037	10.2	.0242	. 0267	.0025	10.3	
Way freight, pick-up or drop, per mile <sup>2</sup> Mine run, per mile <sup>2</sup>	.03975	.045	. 00525 . 0062	13. 2 16. 0	. 027 . 0257	.03	.003	11. 1 16. 7	
Work train, wreck and helping, per mile	. 0363	. 04	. 0037	10.2	.0242	. 0267	.0025	10.3	
		Fore	men.		Helpers.				

Class of service.		Fore	men.		Helpers.			
	Rate.		Increase.		Ra	ite.	Increase.	
	1911	1913	Amount.	Per cent.	1911	1913	Amount.	Per cent.
Yard: Average rates for Groups 1 and 2, day and night, per hour	<b>\$0.375</b>	\$0.385	\$0.01	2.7	\$0.345	\$0.355	\$0.01	2.9

 $<sup>^1</sup>$  Runs of 155 miles or over a day.  $^2$  Runs of 100 miles or less, either straightaway or turn-around, paid as 100 miles (1913).

<sup>51393°—</sup>S. Doc. 493, 64-1---26

# Rates of pay of conductors and trainmen.

the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa									
Class of employees.	Standard mil	rate (per e). <sup>1</sup>	passen	assigned ger train- monthly	Overtime	(per hour).	All runs of less than 155 miles per day, minimum allow- ance for each day passenger train- men are used.		
	1911	1913	1911	1913	1911	1913	1911	1913	
Passenger: Conductors Brakemen in	\$0.0268	\$0.029	\$125.00	\$135.00	\$0.42	\$0.45	\$4.20	\$4.50	
milk cars Brakemen	. 0155 . 015	.016	75.00 70.00	76.50	. 27 . 25	. 255	2.75 2.55	2.55	
Assistant conduc- tors and ticket collectors Baggagemen Flagmen or rear-		.023		82.50		.357 .275		3.57 2.75	
brakemen		.016		78.00		. 26		2.60	
Class of employees.		and irreg- ight (per	Way frei up or d ice (per	ght, pick- lrop serv- mile).		vice (per le).	Work train, wrech and helping service (per mile).		
	1911	1913	1911 3	1913 2	1911	1913 2	1911	1913 2	
Freight: Conductors Flagmen Brakemen	\$0.0363 .0242	\$0.04 .0267 .0267	\$0.03975 4.028 .027	\$0.045 .03 .03	\$0.0388 .0257	\$0.045 .03 .03	\$0.0363 .0242	\$0.04 .0267 .0267	
					1911 (pe	r hour).	1913 (pe	r hour).	
	Class of en	iployees.			Group 1.	Group 2.	Group 1.	Group 2.	
Yard: 5 Day foremen. Day helper. Night foremen Night helper.					\$0.37 .34 .39 .36	\$0.38 .35 .40 37	\$0.36 .33 .38 .35	\$0.37 .34 .39 .36	

Runs of 155 miles or over a day.
 Runs of 100 miles or less, either straightaway or turn-around, paid as 100 miles.
 Mileage in excess of 100 miles in any day paid for pro rata.
 Foremen.

<sup>5</sup> 10 hours or less constitutes a day's work; overtime on basis of actual minutes worked.

Note.—Increases in 1913 over 1910 for services not specified are shown in article  ${\bf E}$  of the award in terms of percentages.

## ZANESVILLE & WESTERN RAILWAY CO.

Passenger conductors on this road had their rates of pay increased from 5 to 6.4 per cent by the award of the board of arbitration. In through freight service conductors secured an advance of 9.6 per cent in work and wreck train service of 8.1 per cent, in mine-run service of 21.6 per cent, and on local or way freight of 13.2 per cent.

Advances made to brakemen were from 6.2 to 10.1 per cent in passenger service, 9 per cent in through freight service, 6.8 per cent in work and wreck train service, 20 per cent on mine and switch

runs, and 11.1 per cent for local way freight service.

Yardmen on this road received the usual increase of 1 per cent per hour for both day and night service, which was equivalent to increases in rates of pay ranging from 2.7 to 3.3 per cent.

Rates of pay of conductors and trainmen.

						Rate				
Class of service or run.	Con	Conductors.			Baggagemen.			Brakemen.		
	1910	1	913	191	0	1913	19	910	1913	
Passenger: Thurston & Zanesville, per day <sup>1</sup> Shawnee & Zanesville, per day <sup>1</sup> Overtime, per hour.	\$4.		\$4. 524 2 4. 988 . 45		2. 50 2. 65 . 25	<sup>2</sup> \$2.5	38	\$2.35 2.50 .24	<sup>2</sup> \$2, 496 <sup>2</sup> 2, 752 , 25	
Conductors. Flagmen.						Brakemen.		Listmen.		
Class of service or run.	1910	1913	1910	19	913	1910	1913	1910	1913	
Freight: Through, per mile Locals, per day Mine run and Zanesville switch run, per day Work, wreck, and circus trains, per day	\$0. 0365 3. 975 3. 70 3. 70	\$0.04 4.50 4.50 4.00	\$0.025 2.70 2.50 2.50	5 \$0. ( 3. ( 3. ( 2. 6	00	\$0. 0245 2. 70 2. 50 2. 50	\$0.0267 3.00 3.00 2.67	\$2.80	-	
Overtime: Through, per hour Locals, per hour Mine run and Zanesville switch run, per hour Work, wreek, and circus	.36 .40	. 40 . 45	. 25 . 27 . 25		267 30 30	. 24 . 27 . 25	. 267	. 28	.31	
trains, per hour	. 37	. 40	. 25		267	. 26	. 267			
						Fultonha	m.	Dra	ikes.	
Class of	employee:	5.			]	1910	1913	1910	1913	
Yard: Day conductors, per hour. Night conductors, per hou Day brakemen, per hour Night brakemen, per hour	r				-	\$0.35 .36 .30 .31	\$0.36 .37 .31 .32	\$0.36 .37 .32 .33	\$0.37 .38 .33 .34	

<sup>1</sup> Two round trips.

<sup>&</sup>lt;sup>2</sup> Figures obtained by conversion of mileage into daily rates.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration, effective Nov. 10, 1913.

				C	Condu	etors.			Bag	gagen	ien.	
Class of service.		R	ate.		Increa	se.	R	ate.		Increase.		
			1910	19	913	Amount.	Per cent.	1910	1913	An	nount.	Per cent.
Passenger: Thurston and Zane Shawnee and Zane Freight: Through, per mile Locals, per day Mine run and Zane run, per day Work, wreck, and day. Yard, average rates, di Fultonham, per h Drakes, per hour	anesville circus tr	switch sins, per	4.75 .0368 3.975 3.70 3.70	2	4. 524 4. 988 . 04 4. 50 4. 50 4. 50 4. 365 . 375	\$0.274 .238 .0035 .525 .80 .30 .01	13. 2 21. 6 8. 1	2.65		38		
		Braken	ien.			Flagn	ien.			List	men.	
Class of service.	R	ate.	Increa	se.	1	Rate.	Incre	ease.	Rat	te.	Iner	ease.
÷ ,	. 0161	1913	Amount.	Per cent.	191	1913	Amount.	Per cent.	1910	1913	Amount.	Per cent.
Passenger: Thurston and Zanesville, per day '		<sup>2</sup> \$2.496	\$0.146	6. 2						••••		

Zanesville, per day<sup>1</sup>....

Through, per mile.
Locals, per day....
Mine run and
Zanesville
switch run, per

hour.... Drakes, per hour.

day.

Yard, average rates,
day and night:
Fultonham, per

Freight:

2.50

. 0245 2. 70

2.50

2.50

.305

 $^{2}$  2.752

.0267 3.00

3.00

2.67

.315

. 252

.0022

.30

.50

.17

.01

10.1

20.0 2.50

6.8 2.50

9. 0 \$0. 0255 \$0. 0267 \$0. 0012 11. 1 2. 70 3. 00 \$0. 0012

3.00

2.67

.50

.17

20.0

6.8 ...

4.7 11.1 \$2.80 \$3.10 \$0.30 10.7

<sup>&</sup>lt;sup>1</sup> Two round trips.

<sup>3.1</sup> <sup>2</sup> Figures obtained by conversion of mileage into daily rates,

# XVII.

CHICAGO & WESTERN INDIANA RAILROAD AND BELT RAIL-WAY CO. OF CHICAGO AND BROTHERHOOD OF LOCOMOTIVE ENGINEERS, BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN, AND BROTHERHOOD OF RAILROAD TRAIN-MEN: 1913.

This arbitration was the result of a controversy which developed in 1913 between the Chicago & Western Indiana and the Chicago Belt Railroads and the engineers, firemen, and trainmen respecting changes requested in the rates of pay and working conditions of locomotive engineers employed by the two railroads. An agreement to submit the controversy to arbitration was entered into August 6, 1913, and was followed by arbitration hearings held in the Federal Building at Chicago, beginning September 2, 1913. The arbitration award was rendered September 17.

The board of arbitration in this case was composed of E. S. Huston, chairman, W. S. Jackson, general manager of the Chicago & Eastern Illinois Railroad, and F. A. Burgess, assistant grand chief of the

Brotherhood of Locomotive Engineers.

#### DEMANDS OF THE EMPLOYEES.

The proposed changes in the wage scale and working conditions submitted to arbitration were set forth in a series of articles numbered from 1 to 7, inclusive. Stated in summary form, the employees requested in articles 1 and 2 that the rates of pay per day of engineers be increased from \$4.50 in switching service and \$4.25 in transfer service to a rate of \$5 on engines with cylinders 20 inches or over in diameter, and \$4.50 on engines with cylinders under 20 inches in diameter, with proportional increases in the pay for overtime.

Article 3 embodied the proposed rule that engineers' time should begin when required to report for duty and end when returning to

point at which they started to work.

In article 4 it was requested that engineers in regular suburban service be paid \$5.27 per day, overtime pro rata, all light-running and additional service to be paid for at the rate of 50 cents per hour.

Article 5 proposed that engineers be relieved from rendering assistance in coaling engines or cleaning fires at any point where men were maintained for that purpose, and that engineers when required in emergency at any other point to assist in such work to receive pay for the same at overtime rate with a minimum allowance of one hour, this not to be deducted from other overtime in computing time for trip.

Article 6 stipulated that engineers should not be required to back up

trains except in case of emergency.

Article 7, that engineers should be placed on engine doing work at Eighty-third Street and Fifty-first Street roundhouse.

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## FINDINGS OF THE BOARD OF ARBITRATION.

In response to the issues presented in articles 1 and 2, the board of arbitration ordered an increase in the rates of pay of engineers employed in work-train service in the Chicago Terminal district from

\$4.15 to \$4.40, with a proportional increase for overtime.

In denying the increases requested in articles 1 and 2 as to transfer and switching service, the board pointed out that the defendant companies were owned and operated by 12 railroads running into Chicago and that the prevailing rate in the Chicago district for both switching and transfer service on these roads was \$4.25 per day as compared with rates of \$4.50 per day for transfer service and \$4.25 per day for switching service on the defendant railroads. It was further pointed out that each of the 12 roads referred to paid a flat rate for both transfer and switching service, without regard to size or diameter of cylinders.

Under article 3 the employees were granted the specific rule

requested.

In response to the issue presented in article 4, the board declined to award an increase in the rates paid for suburban service, stating that the proposed rate of \$5.27 per day was the rate in force at the time of the award. For all light running and for all additional service required of suburban engineers the board directed that each railroad pay pro rata according to the class of service, but not to exceed 50 cents per hour, as specified in the request.

'Under article 5 the board awarded that engineers should not be required to assist in coaling engines or cleaning fires at any point where men were maintained for that purpose, but if required to clean fires on completion of the day's work should be paid for one hour

at overtime rate.

With respect to the issue presented in article 6, the award stipulated that engineers in transfer service should not be required to back up with trains when it was practicable to turn their engines.

In response to the issue presented in article 7, the board found that no evidence had been introduced on this item and declined to make

an award upon it.

A dissenting opinion was filed by arbitrator F. A. Burgess to the findings of the board with respect to each issue submitted to arbitration, with the exception of the rule awarded under article 3. It was held by Mr. Burgess that the evidence established the fact that other properties performing like service in the Chicago district, including three roads, lessees of the properties having part in the arbitration, were paying a high rate, either by the rate itself or through more favorable working conditions. This rate, Mr. Burgess pointed out, was to a very large extent the result of the action of the board of arbitration, which practically gave six months' study and consideration to the question. No good reason, according to Mr. Burgess, had been advanced why all engineers performing a similar service and over the same rails in the Chicago district should not receive therefor the highest rate of compensation for such service.

## APPLICATION OF THE AWARD.

A comparison of the printed schedule of rules and rates of pay in effect on the Chicago & Western Indiana and Chicago Belt Railroads before and after the arbitration shows that the rates of pay of engineers in work-train service were increased as a result of the award from \$4.15 to \$4.40 per day, or 6 per cent. In suburban service engineers were awarded compensation pro rata, not to exceed 50 cents per hour, for light running and additional service, which to some extent, as indicated by the record, had been performed before the arbitration without extra compensation. In the case of the rules established by the award respecting the beginning and ending of a day's work, coaling engines and cleaning fires, and backing up trains, stipulations respecting the conditions of employment involved in these rules are shown for the first time in the schedule adopted after the award. The extent of the advantage, if any, which accrued to the engineers by the adoption of these rules can not be shown, therefore, by a comparison of the printed schedules. It will be noted, however, that the award established the specific rule requested by the employees as to the beginning and ending of a day's work.

# XVIII.

# THE CHICAGO, BURLINGTON & QUINCY RAILROAD AND ORDER OF RAILWAY CONDUCTORS AND BROTHERHOOD OF RAIL-ROAD TRAINMEN: 1913.

Arbitration for the settlement of differences which arose between the Chicago, Burlington & Quincy Railroad Co. and the conductors and trainmen in 1913 was resorted to after the United States Board of Mediation and Conciliation had unsuccessfully endeavored to have them settled by mediation. The case developed from the demands made in December, 1912, by the conductors and trainmen, including brakemen, baggagemen, and flagmen, that the schedule of rules and wages that had been in effect since 1902 should be completely revised. The conductors and trainmen were practically all unionized, and presented their demands jointly through the Order of Railway Conductors and the Brotherhood of Railroad Trainmen.

The proposition submitted to the company by the employees was embodied in a table of 150 rules relating both to working conditions and to rates of pay. Beginning April 7, 1913, and until August 12, 1913, these proposals were considered in conferences between representatives of the conductors and trainmen and officers of the Chicago, Burlington & Quincy Railroad Co. These conferences resulted in the adoption of 111 of the rules, but no agreement could be reached

with regard to the other 39.

In an effort to effect an agreement both parties to the controversy made application to the United States Board of Mediation and Conciliation to settle their differences by mediation. Mediation conferences begun on August 21, 1913, however, proved unsuccessful, but through the efforts of the United States Commissioner of Mediation and Conciliation the company and the Order of Railway Conductors, and the Brotherhood of Railroad Trainmen signed an agreement on August 27, 1913, to submit the remaining 39 rules to arbitration under the provisions of the Newlands Act.

A board to consist of six arbitrators was agreed on, as provided for in the act. Two arbitrators were named by the company and two by the employees. As these four arbitrators could not agree on the selection of the other two, they were appointed under the law by

the United States Board of Mediation and Conciliation.

The arbitrators named by the company were Patrick H. Morrissey, assistant to the vice president of the Chicago, Burlington & Quincy Railroad Co., and Fairfax Harrison, president of the Chicago, Indianapolis & Louisville Railway. On December 1, 1913, Mr. Harrison resigned and Pierce Butler, an attorney, was appointed on December 3 by the company as his successor. The employees were represented by Edward P. Curtis, vice president of the Order of Railway Conductors, and Emmett L. Harrigan, general chairman of the grievance committee of the Northern Pacific

Railway Co. The neutral arbitrators named by the Board of Mediation and Conciliation were Henry S. Boutell, of Washington, D. C., and Gerrit J. Diekema, of Holland, Mich.

This board met and organized on November 3, electing Mr. Boutell as chairman. Hearings were begun on November 6, 1913, and the following three months were consumed with the hearings and the examination of nearly 10,000 typewritten pages of evidence and hundreds of exhibits, schedules, maps, and profile blue prints. The award was announced on February 19, 1914.

## PROPOSALS AND AWARD.

In view of the great mass of data making up the evidence in this case, a direct comparison of proposals and award under each of the 39 questions involved in the arbitration is considered the clearest and most simple way of presenting the essential facts involved. This method of presentation is followed below by showing the proposals and awards under each question in parallel columns.

## QUESTION 1.

PROPOSAL.

AWARD.

If for any reason a trainman is not called and thereby loses a trip through no fault of his, he will be paid for the trip.

If through the fault of the company or any of its employees a trainman is not called and thereby loses a trip through no fault of his, he will be paid for the time lost, but may be used extra in his class of service if permitted to resume his run or car without being absent from it more than two trips. It is understood that a freight trainman may be used in passenger service, but a passenger trainman will not be used in freight service. This rule will not apply to brakemen with less than six months' experience, nor to pool crews run around, pay for which is provided in rule 63 (b). This rule shall not be deemed to relate to a failure properly to assign a trainman under the provisions of this schedule relating to seniority.1

## QUESTION 2.

The word "terminal" is held to mean the regular recognized point on each division where crews usually are started from or laid up.

Terminals are the points where runs begin or end. The turning point on a turn-around run shall be considered as an intermediate point on a continuous

When the company ties up train crews in road service between usual terminals, they will be paid the mileage of the schedule to the tie-up point, and nothing will be allowed for the time tied up until after the expiration of 24 hours from the time called for the trip on which tied up.

For the whole or any portion of the first 10 hours of each following 24-hour period during which they are tied up, they will be paid 10 miles per hour.

<sup>&</sup>lt;sup>1</sup> This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration.

## QUESTION 2—Continued.

PROPOSAL.

AWARD.

Allowance for time held will not be computed independent of any trip time, nor will any terminal time be allowed at such tie-up place.

This provision shall not apply to work train, wrecking and snowplow service.

Interpretation: Under this rule a minimum of 100 miles will be allowed for the run from initial point to tie-up point. In case crew is held at tie-up point 24 hours or more from time called for trip on which tied up, time of succeeding trip will begin at the expiration of 24 hours from time crew was called to leave initial terminal, and a minimum of 100 miles will be allowed fron tie-up point to terminal.<sup>1</sup>

# QUESTION 3.

Terminal limits at which road time ceases and terminal time begins, or vice versa, will be the first switch used for yard purposes approaching terminal, or if a semaphore is used governing the entrance to yard, semaphore will be the limit. Trains detained by trains ahead at these points will come under this rule and will be paid terminal overtime from time stopped.

Terminal time for outgoing trains will cease and road time will begin when the train clears the track on which it is made up. On inbound trains road time will cease and terminal time will begin when the train stops on the receiving track, or is stopped in the yard, or at the semaphore governing the entrance to the yard.

Following are the exceptions to the above rule:

Clyde, Ill.

On inbound trains, road time ceases and terminal time begins when engine arrives at Clyde tower, or is stopped by the home signal governing the entrance to the yard. If the towerman stops a train at the tower signal when there is no obstruction on the main line between such outer signal and the entrance to the yard, road time will cease and terminal time will begin when engine is stopped.

On outbound trains, terminal time ceases and road time begins when engine passes the pot signal about 500 feet west of Clyde tower.

Galesburg, Ill.

On inbound trains, road time ceases and terminal time begins on arrival of engine at Prospect Street or Portal.

On outbound trains, terminal time ceases and road time begins when train passes Prospect Street or Portal, except that on eastbound trains which pick up at the ice house or ice cars, terminal time continues until they leave the ice house.

If a train or a part of a train is pulled around the hump, as, for example, No. 74 from Quincy or Ottumwa going to the ice

<sup>&</sup>lt;sup>1</sup> The rule covering this point in the schedule in effect prior to this arbitration was rule 15, and was as follows: "Terminals are the points where runs begin or end. The turning point on a turn-around run shall be considered as an intermediate point on a continuous run."

# QUESTION 3-Continued.

PROPOSAL.

AWARD.

house, or No. 79 from Chicago, pulling into the west sorting yard, actual time with a minimum of 30 minutes will be allowed.

On trains from Aurora or Savanna, which pull around the hump, the conductor will be relieved at Prospect Street and only the brakeman will be paid terminal time for pulling train around the hump.

On trains from Peoria which pull around the hump, the conductor will accompany the train and the entire crew will be allowed a minimum of 30 minutes.1

Daytons Bluff, Minn.

On outbound trains, terminal time ceases and road time begins when the train leaves the yard track on which it is made up, unless train is stopped and held at Oakland by the block or some other cause over which the trainmen have no control, in which case terminal time continues until train leaves Oakland.

On inbound trains, road time ceases and terminal time begins when the train passes Oakland.

Grand Crossing, Wis. On southbound trains, terminal time ceases and road time begins when train clears the track upon which it is made up, except when stopped at the crossing on account of same being blocked, in which case terminal time ceases and road time begins when crossing is clear and train again starts.

Savanna, Ill.

On northbound trains, terminal time ceases and road time begins when train clears the track upon which it is made up, except when stopped at the crossing on account of same being blocked, in which case terminal time ceases and road time begins when crossing is clear and train again starts.

Ottumwa, Iowa.

On eastbound trains into Ottumwa which are stopped west of the Chicago, Milwaukee & St. Paul crossing (which is inside the yard limit board) on account of the yard being unable to receive them, road time will cease and terminal time will begin at time so stopped.

On westbound trains, leaving Ottumwa, which are stopped after clearing the track on which made up before passing the passenger station, terminal time will cease and road time will begin when the train passes the passenger depot, except when caused by the arrival of a westbound passenger train, which is to have precedence over the freight train.

<sup>1</sup> Trains going into the new yard will be paid the same as if they had pulled into the hump receiving vards.

## QUESTION 3—Continued.

PROPOSAL.

#### AWARD.

East St. Louis, Ill. (Hannibal and Beardstown division trains):

On outbound trains terminal time ceases and road time begins when the train leaves Bridge Junction.

On inbound trains road time ceases and terminal time begins when train arrives at Bridge Junction.

Beardstown, Ill.:

On southbound trains into Beardstown, if stopped by the semaphore north of the Illinois River bridge, road time will cease and terminal time will begin from time so stopped.1

Northbound trains into Beardstown: If a train should be held out of the yard south of the crossover because there is a train occupying the main line between this crossover and the entrance to the northbound yard, terminal overtime will be paid.

Hannibal, Mo .:

On inbound Brookfield division trains road time ceases and terminal time begins when train arrives at Missouri, Kansas & Texas crossing, Main Street.
On outbound Brookfield division trains

terminal time ceases and road time begins when train passes Main Street crossing.

The present practice of paying terminal delay to southbound trains at Ilasco or to northbound trains at end of double track or gravel digger switch will be continued.

Quincy, Ill.

On inbound Brookfield division trains road time ceases and terminal time begins when train arrives at the semaphore south of the wye.

On outbound Brookfield division trains terminal time ceases and road time begins when train passes the semaphore near the iron works.

Kansas City, Mo.:

On outbound St. Joseph division trains terminal time ceases and road time begins when train passes Twelfth Street. On inbound St. Joseph division trains

road time ceases and terminal time begins when train arrives at crossover switch,

Union Depot yards.

On outbound Brookfield division trains terminal time ceases and road time begins when train passes Twelfth Street semaphore, south end of the Union Depot yards.

On inbound Brookfield division trains road time ceases and terminal time begins when train arrives at crossover switch, Wabash tower.

St. Joseph, Mo.:

On outbound Brookfield division trains terminal time ceases and road time begins when train passes Florence crossing.

<sup>1</sup> This will not apply where a train is held at the semaphore to let a northbound train out of the yard.

# QUESTION 3-Continued.

PROPOSAL.

AWARD.

On inbound Brookfield division trains road time ceases and terminal time begins when train arrives at switch leading to Florence yards, north of Florence crossing.

On northbound St. Joseph and Wymore division trains terminal time ceases and road time begins when train passes Cedar

 ${f Street}.$ 

On southbound St. Joseph and Wymore division trains road time will cease and terminal time will begin when train passes Francis Street.

Lincoln, Nebr.:

On outbound Lincoln division trains terminal time ceases and road time begins when train leaves Cushman.

On inbound Lincoln division trains road time ceases and terminal time begins

when train arrives at Cushman.

When head brakeman cuts off engine, brings it back, and picks up way car, taking it to the way-car tracks, overtime is allowed until relieved from duty, provided more than 30 minutes is consumed.

Denver, Colo.:

When outbound trains pass the entrance at the east end of the Thirty-first Street yard, terminal time shall cease and road time shall begin.

When inbound trains arrive in the Thirty-first Street yard, or are delayed by others at the entrance thereto, road time shall cease and terminal time shall begin.

Sterling, Colo.:

On outbound trains, terminal time will cease and road time will begin when train leaves the Union Pacific Depot.<sup>1</sup>

## QUESTION 4.

Trains leaving division terminal having cars to be set out on trip shall have same placed on head end of train in station order.

So far as practicable short cars shall be placed on the head end of trains out of terminals in station order.<sup>1</sup>

Interpretation by board: Trains will not be started out of division terminals, where there is no switch engine, with cars mixed, with the intention of having the switching done at intermediate stations in order to avoid paying for switching at terminals.

# QUESTION 5.

Road crews shall be given all work outside of yard limits. Yard crews will not be run outside of yard limits except in case main line is blocked and there are no trainmen available.

This proposed rule is denied.

¹ This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration.

# QUESTION 6.

## PROPOSAL.

AWARD.

Trainmen running to Union Stock Yards at Chicago will handle only stock from Hawthorne Yard to the United States yards and empty stock cars back to Hawthorne Yard, and will be paid actual time at their overtime rates on the basis of 15 miles per hour from the time train arrives at Clyde, or stopped at home semaphore approaching Clyde, until way car is put on way-car track on return trip. This time to be paid for and in addition to and independent of all other time earned on road trip. Road crews will take only what stock they have into Hawthorne Yard to the United States yards. Road crews who have no stock into Hawthorne Yard will not go to the United States yards.

Trainmen running to the Union Stock Yards at Chicago will be paid through freight rates with a minimum of three hours from the time train arrives at Clyde, or is stopped at the home semaphore approaching Clyde, until way car is put on way-car track on return trip. This is to be in addition to the road trip.1

## QUESTION 7.

Trainmen will not be required to take train orders over the telephone. A trainman will not be required to desert his train to get or receive the block over the telephone.

In every instance dispatchers will endeavor to plan train movements to enable them to issue orders to train crews through open offices.

Trainmen will not be required to take orders over the telephone except in cases of necessity to avoid unreasonable delays that could not be anticipated by the dispatcher.

Trainmen will not be required to deadhead to blind sidings to secure block for their trains. This will be left optional with the crew.2

# QUESTION 8.

Rates of pay, trainmen, passenger service:

(a) Trainmen in passenger, mail, milk, and express service shall be paid as follows on all runs of 4,000 miles or less per month: Conductors, \$140 per month;

baggagemen, \$82 per month; brakemen and flagmen, \$75 per month.

(b) On all runs of over 4,000 miles and not exceeding 5,500 miles per month: Conductors, \$165 per month; baggagemen, \$96.75 per month; brakemen and flagmen, \$87.50 per month.

(c) All mileage in excess of 5,500 miles per month will be paid for as follows: Conductors, 3 cents per mile; baggagemen, 1.75 cents per mile; brakemen and flagmen, 1.5 cents per mile.

(d) Baggagemen and brakemen required to operate dynamos or serve as train electricians will receive \$15 per month in addition to their regular rate.

(e) Overtime rates: Conductors, cents per hour; baggagemen, 35 cents per

The minimum rates of pay of passenger trainmen shall be as follows: Conductors, \$134.20 per month; baggagemen, \$80.85 per month; brakemen and flagmen, \$74.90 per month.

For the runs hereinafter specified, trainmen shall be paid as follows:

	Con- duc- tor.	Baggage- man.	Brake- man and flag- man.
Aurora-Rockford. Rockford-Rochelle Sterling-Shabbona Clinton-Mendota. Galesburg-Mendota	\$146, 30 134, 20 134, 20 134, 20 146, 30		\$74.90 74.90 74.90 74.90
Streator - Aurora - Wal- nut - Chicago-Mendota - Mendota-Chicago - Chicago - Galesburg - Chicago - Quincy - Chicago - Burlington - Chicago - Burlington - Chicago - Surlington - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicago - Chicag	154. 00 146. 30 146. 30 165. 00 165. 00	\$81.95 88.55 88.55 88.55	74. 90 74. 90 74. 90 74. 90 74. 90 74. 90 74. 90
Chicago-Savanna	165.00	88. 55	74.90

1 The rule in effect prior to this arbitration covering this point provided for payment of 2½ hours' arbitrary to crews who go through to the Union Stock Yards.

2 This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration; on the contrary, the statement is made that the employer required more service of its trainmen of this character than any other western road.

# QUESTION 8-Continued.

PROPOSAL.

AWARD.

hour; brakemen and flagmen, 30 cents per hour.

Galesburg-Quincy				
Galesburg-Burlington, via Galva		duc-		and flag-
Galesburg-Burlington, via Galva	Galesburg-Quincy	\$165,00		\$74.90
Via Galva	lington		! '	74.90
Rock Island-Savanna   134, 20   74, 9	Galesburg-Burlington, via Galva	150. 30		75,60
Galesburg-Rushville.   150.00   Minneapolis-Savanna.   165.00   88.55   74.90   St. Paul-Savanna.   165.00   St. Paul-Savanna.   165.00   180.85   74.90   St. Paul-Savanna.   184.20   St. Paul-Savanna.   180.85   74.90   St. Paul-Savanna.   184.20   St. Paul-Savanna.   180.85   74.90   St. Paul-Savanna.   180.8	Rock Island-Savanna	150.00 134.20		75.00
Strington	Galesburg-Rushville	150,00	88 55	74.90
134.20	St. Paul-Savanna		88. 55	74.90
134.20	Quincy-Burlington	134. 20		
134.20	Ottumwa-Des Moines	134. 20	1 80, 85	74.90
134.20	Des Moines-Albia	134, 20 134, 20	1 80. 85	74. 90 74. 90
Burlington-Ottumwa. 143,00 Burlington-Creston. 165,00 Burlington-Omaha-Pacific Junction. 165,00 Burlington-Omaha-Pacific Junction. 165,00 Burlington-Omaha-Pacific Junction. 165,00 Burlington-Omaha-Pacific Junction. 165,00 Burlington-Indianola. 134,20 Bes Moines-Cains ille-Mount Ayr-Osceola. 143,00 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Mount Ayr. 180,85 Des Moines-Mount Ayr. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Mount Ayr. 180,85 Des Moines-Mount Ayr. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-Cains ille. 180,85 Des Moines-	Winfield - Washington-			
Burlington-Omaha-Pacific Junction	Burlington-Ottumwa	143.00	1 80, 85	74.90
Cinc   Junction   165.00   88.55   74.90	Burnington-Omana	165.00	88, 55	74.90
Des Moines-Cains ille.  Mount Ayr-Osceola.  Des Moines-Cains ille.  Des Moines-Cains ille.  1 80. 85  Creston-St. Joseph. 184. 50  Keokuk - Shenandoah- Centerville-Van Wert Rock Island-St. Louis.  Beardstown-Da-enport St. Louis-St. Joseph. 165. 00  Burlington-St. Louis.  Beardstown-Da-enport St. Louis-St. Joseph. 165. 00  Burlington-St. Louis.  Beardstown-Da-enport St. Louis-St. Joseph. 165. 00  Burlington-St. Louis.  165. 00  Burlington-St. Louis.  (While Kansas City-St. Louis (While Kansas City-St. Louis runs are in joint pool's with Chicago & Alton bra ke me n and flagmen will be paid \$79.31.)  Hannibal - Palmyra Junction-St. Joseph-Kansas City  Brookfield - Hannibal- St. Joseph-Kansas City Brookfield-Kansas City  Rockfield-Kansas City  Rockfiel	eific Junction	165.00	88. 55	74.90
Mount Ayr-Osceola. 143.00 1es Moines-Cains: ille. Des Moines-Cains: ille. Des Moines-Cains: ille. Des Moines-Cains: ille. Des Moines-Cains: ille. Des Moines-Cains: ille. Des Moines-Centerville-Van Wert Rock Island-St. Louis. 163.00 188.55 74.90 128.719 77.60 85.25 75.00 80.85 74.90 128.719 77.60 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.00 85.25 75.	Dac Moines Coinc ille.	134. 20	1 80.85	74.90
Creston-Cumberland 148.30	Mount Ayr-Osceola  Des Moines-Cains ille		1 80. 85	74.90
Creston-St. Joseph   134.20   180.85   74.90   Surlington-Carrollton   155.00   So.85   75.00   So.85   74.90   So.85   74.90   So.85   75.00   So.85   So.85   So.85   So.85   So.85   So.85   So.85   So.85   So.85   So.8	Des Moines-Mount Ayr.		1 80. 85	1
158.79	Creston-St. Joseph	134. 20	1 80, 85	74.90
Rock Island-St. Louis.   165.00   190.30   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   74.90   7	Keokuk - Shenandoah-	1	\$1 287.19	)
Do.	Centerville-Van Wert Rock Island-St. Louis		1 2 80. 85 85. 25	75.00
Do.	Beardstown-Davenport	134. 20 165. 00		74.90 74.90
Burlington-St. Louis				3 74. 90
Hamibal - Burlington (Nos. 3 and 10 only).  Hamibal - Palmyra Junction-Quincy  Cameron Junction-St. Joseph-Kansas City.  Brookfield - Hamibal- St. Joseph  Brookfield-Kansas City.  Brookfield-Kansas City.  Brookfield-Kansas City.  CNo. 5 men pooled act as baggagemen and flagmen.)  Kansas City-Cameron Junction  180.85  74.90  75.00  74.90  75.00  180.85  74.90  75.00  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76	Burlington-St. Louis			74.90
Hamibal - Burlington (Nos. 3 and 10 only).  Hamibal - Palmyra Junction-Quincy  Cameron Junction-St. Joseph-Kansas City.  Brookfield - Hamibal- St. Joseph  Brookfield-Kansas City.  Brookfield-Kansas City.  Brookfield-Kansas City.  CNo. 5 men pooled act as baggagemen and flagmen.)  Kansas City-Cameron Junction  180.85  74.90  75.00  74.90  75.00  180.85  74.90  75.00  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76	(While Kansas City-	100.00	( 	74.90
Hamibal - Burlington (Nos. 3 and 10 only).  Hamibal - Palmyra Junction-Quincy  Cameron Junction-St. Joseph-Kansas City.  Brookfield - Hamibal- St. Joseph  Brookfield-Kansas City.  Brookfield-Kansas City.  Brookfield-Kansas City.  CNo. 5 men pooled act as baggagemen and flagmen.)  Kansas City-Cameron Junction  180.85  74.90  75.00  74.90  75.00  180.85  74.90  75.00  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76	St. Louis runs are in joint pools with Chicago			
Hamibal - Burlington (Nos. 3 and 10 only).  Hamibal - Palmyra Junction-Quincy  Cameron Junction-St. Joseph-Kansas City.  Brookfield - Hamibal- St. Joseph  Brookfield-Kansas City.  Brookfield-Kansas City.  Brookfield-Kansas City.  CNo. 5 men pooled act as baggagemen and flagmen.)  Kansas City-Cameron Junction  180.85  74.90  75.00  74.90  75.00  180.85  74.90  75.00  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76.90  76	& Alton brakemen and flagmen will be			
102.90	paid \$79.31.) Hannibal - Burlington			
Junction-Quincy 134.20 180.85 74.90 Cameron Junction-St. Joseph-Kansas City 148.00 75.00 Brookfield - Hannibal- St. Joseph	(Nos. 3 and 10 only)	152.90	1 80. 85	74.90
165.00	Innetion-Oninev	134.20	1 80. 85	74.90
Quincy-Kansas City (No. 5 men pooled act as baggagemen and flagmen.) Kansas City-Cameron Junction	Joseph-Kansas City	148.00		75.00
Quincy-Kansas City (No. 5 men pooled act as baggagemen and flagmen.) Kansas City-Cameron Junction	St. Joseph	165.00	1 91. 70	74.90
(No. 5 men pooled act as baggagemen and flagmen.) Kansas City-Cameron Junction				ه 74. 90
as baggagemen and flag- men.) Kansas City-Cameron Junction. 180.85		100.00	1 5 91.88	4 80. 85
Kansas City-Cameron Junction St Joseph Omaha 152.00	as baggagemen and flag-			
St Toseph-Omaha 152 00 74 00	Kansas City-Cameron		1.80.95	
	St Tosenh-Omaha		1 96. 08	74.90
Kansas City-Omaha 165.00 196.08 74.90 St. Joseph-Kansas City	St. Joseph-Kansas City		1 90.08	74.90
Kansas City-Omaha 165. 00 196. 08 74. 96 St. Joseph-Kansas City (trains 44, 13, 44, 112). 140. 25 74. 90 St. Joseph-Kansas City	St. Joseph-Kansas City			74.90
(trains 46, 45)	St. Joseph-Villisca	150.00	1 85. 00	74. 90 75. 00 74. 90
(trains 4f, 45, 11, 112).  8t. Joseph-Kansas City (trains 46, 45)	St. Joseph-Chariton St. Joseph-Omaha-	140. 25		74.90
St. Joseph-Omaha- Kansas City 474.90 Chariton-Kansas City-	Kansas City.			474.93
St. Joseph	St. Joseph		1 80. 85	

<sup>1</sup> Includes amount paid by express company.
Two men; 3.30 Sunday.
Brakeman.

Flagman.
Three men.

# QUESTION 8-Continued.

PROPOSAL.

AWARD.

-	Con- duc- tor.	Baggage- man.	Brake- man and flag- man.
Lincoln-Omaha	\$137.50		\$74.90
Lincoln-Pacific June- tion (trains 23, 24) Lincoln-Sioux City	152.90 137.50		74.90 74.90
Sioux City-O'Neill Schuyler-Omaha	134. 20 140. 00		74. 90 .74. 90
Lincoln-Rayenna Sargent-Aurora	165.00 145.00		80.00 75.00
Burwell-Palmer	134. 20		75.00
Columbus-Lincoln Stromsburg-Alma	134. 20 134. 20 134. 20		74. 90 74. 90 74. 90
Wymore-L i n c o l n- Beatrice	134. 20		74.90
Beatrice Lincoln-Wymore (Sunday only)	137. 50		74.90
Lincoln-Concordia Holdredge-Edgar	145.00 137.50		74.90 74.90
Chester-McCool Junc- tion	134. 20		74.90
Nebraska City-Lincoln Falls City-Nebraska	140.00 134.20		74. 90 74. 90
City	134. 20 134. 20		74.90
Red Cloud-Hastings Republican-Oberlin	134. 20 134. 20		74.90 74.90
Orleans-St. Francis Denver-Lyons (one	134. 20		74.90
round trip) Sterling-Holdredge Ravenna-Seneca	134. 20 145. 00 134. 20		74.90 85.00 78.65
Travellina-Delleca	104. 20		10.00

All other passenger runs to be paid in accordance with the rates in effect February 1, 1914.

Special allowances, relief trips, and other conditions affecting passenger trainmen in effect February 1, 1914, shall continue.

The overtime rates shall be 38.5 cents per hour for conductors and 25.3 cents per hour for baggagemen, flagmen, and brakemen.

Baggagemen and brakemen required to operate dynamos will be paid at the rate of \$15 per month in addition to their regular rates for the number of trips on the runs on which they are required to operate dynamos.

New runs hereafter established shall be paid the equivalent of rates paid for similar runs on the division, but trainmen thereon shall be paid at least the minimum rates named above.

The minimum rates specified herein will include amounts paid by the express company on runs where such payments have been heretofore made, but should the amounts paid by the express company be withdrawn the minimum rates will be continued.

## QUESTION 9.

PROPOSAL.

AWARD.

Passenger crews will not be required to handle freight cars in passenger trains except in case of emergency. If it is necessary to handle freight cars in passenger trains, conductors will receive 1.5 cents per mile and baggageman and brakeman and flagman will receive 1.25 cents per mile for the distance such freight cars are handled in addition to their regular monthly pay.

If the baggageman is not required to

If the baggageman is not required to assist in the work of handling freight cars,

he will not be paid extra.

If it is necessary to handle freight cars in a passenger train, conductor will receive 1.25 cents per mile and baggageman, brakeman, and flagman will receive 1 cent per mile for the distance such freight cars are handled in addition to their regular monthly pay.

If baggageman is not required to assist in the work of handling freight cars, he

will not be paid extra.

This rule shall apply to passenger service only and will not apply to mixed trains nor to a combination of freight and passenger trips made on the same day.

## QUESTION 10.

Pay trains, officers' specials, inspection engine, or inspection trains shall be manned by at least one conductor and one flagman in train service, who will be paid, conductors, 3.4 cents per mile, and flagman, 2.4 cents per mile, with a minimum of \$4.07 for conductor and \$2.75 for flagman per day.

If held in or laid up for one day or more, they will be paid at the minimum rates given above, living expenses to be borne by the company when away from

home.

Pay trains, officers' specials, or inspection trains shall be manned by at least one conductor and one flagman in train service, who will be paid, conductors, 3.4 cents per mile, and flagman, 2.4 cents per mile, with a minimum of \$4.07 for conductor and \$2.75 for flagman per day.

If held in or laid up for one day or more, they will be paid at the minimum rates given above, living expenses to be borne by the company when away from home.<sup>2</sup>

#### QUESTION 11.

Trainmen will not be required to handle trains or engines to or from yards and depot, nor pick up or set out cars where yardmen are employed, nor couple or uncouple air, signal, or steam hose, nor couple or uncouple safety chains, nor light coaches, nor put up or take down electric connectors, nor do other work that should be done by carmen at any point where car inspectors or car repairers are employed. If a passenger crew turns or lays up at a point where no carmen or yardmen are employed, they will be paid for all time used to get their train ready and to put it away at their overtime rates, actual minutes to be counted.

At points where yardmen are employed and are at the time in actual service, trainmen will not be required to handle trains or engines to or from yards and depots, nor to pick up or set out cars. nor to couple or uncouple air, signal, or steam hose, nor to couple or uncouple safety chains, nor to do other work usually performed by carmen where car inspectors or car repairers are employed.

¹ This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration. ² Rule 20 in the schedule in effect prior to this arbitration covering this item reads: Crews running pay trains officers' specials, or inspection trains will be paid at the rate of 3.38% cents per mile for conductors and 2.31 cents per mile for brakemen, with a minimum of \$4.07 and \$2.75 per day for conductors and brakemen, respectively. If crews are held in or laid up for a day, they shall be paid at the minimum rate given above; living expenses will be borne by the company when away from home. It will thus be seen that the rate per mile in this class of service for conductors is increased from 3.38% cents per mile to 3.4 cents per mile, and for brakemen or flagmen from 2.31 to 2.4 cents per mile, and for brakemen or flagmen from 2.31 to 2.4 cents per mile, and for brakemen or flagmen from 2.31 to 2.4 cents per mile, and for brakemen or flagmen from 2.31 to 2.4 cents per mile, and for brakemen or flagmen from 2.31 to 2.4 cents per mile, and for brakemen or flagmen form 2.31 to 2.4 cents per mile, and for brakemen or flagmen form 2.31 to 3.4 cents per mile, and for brakemen or flagmen form 2.31 to 3.4 cents per mile, and for brakemen or flagmen form 2.31 to 2.4 cents per mile, and for brakemen or flagmen form 2.31 to 2.4 cents per mile, and for brakemen or flagmen form 2.31 to 2.4 cents per mile, and for brakemen or flagmen form 2.31 to 3.4 cents per mile, and for brakemen or flagmen flagmen form 2.31 to 3.4 cents per mile, and for brakemen flagmen 
# QUESTION 12.

## PROPOSAL.

## AWARD.

Conductors, collectors, brakemen, or flagmen will not be required to handle cream or cream cans, fish, or any other freight or express matter liable to spoil uniforms. Brakemen or flagmen will not be required to assist baggagemen at terminals. This rule does not apply to the milk train between Shabbona and Chicago.

Brakemen required to ride in baggage cars or cream cars to handle milk or cream cans or other articles carried in such cars shall be allowed additional pay at the rate of \$10 per month for the days so worked, and shall not be required to wear uniforms. This not to apply to the Shabbona milk run.<sup>1</sup>

# QUESTION 13.

No deductions of pay will be made in salary of assigned trainmen if they are ready for service. No deductions will be made from the pay of assigned trainmen if they are ready for service; but when not used on their assigned runs they may be used in other service of a similar character or in cases of emergency, and their pay when so used shall be on the basis of the higher-paid service, but they shall not be paid for both services.<sup>1</sup>

# QUESTION 14.

It is agreed that the company will not make reductions in crews as of December 1, 1912, or increases in mileage for the purpose of offsetting the increases granted passenger trainmen by reason of the change of the method of payment of passenger trainmen.

It is agreed that the company will not make reductions in crews or increases in mileage as of December 1, 1913, for the purpose of offsetting the increases of wages given passenger trainmen.

# QUESTION 15.

Trainmen in suburban service shall be paid as follows:

Trainmen in suburban service shall be paid as follows for calendar working days per month:

	Miles	Num-	Rate per month.
Runs from—	run.	ber crews.	Con- duc- tors.
chicago to Riverside (4 round trips per day,			
calendar working days per month)	88.8	2	\$112.80
calendar working days per month)	84.8	3	112.80

Run.	Crews.	Con- duc- tors.	Collectors.
Chicago to Downers Grove (2 round trips daily) Chicago to Downers Grove (3 round trips daily)	· 6	\$112.80 137.00	\$85.00 96.00
Chicago to Aurora (1 round trips daily)	23	112.80	96. 00 85. 00 110. 00
Chicago to Aurora to Downers Grove (1round trip daily)	. 3	137.00	96.00

<sup>&</sup>lt;sup>1</sup> This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration.

<sup>2</sup> Pooled.

# QUESTION 15-Continued.

PROPOSAL.

AWARD.

Runs from—	Miles run.	Num- ber crews.	Rate per month.  Conductors.
Chicago to Downers Grove(3round trips per day, calendar working days per month) Chicago to Aurora (1 round trip per day,	127. 2	4	<b>\$137.00</b>
calendar working days per month)	74.8	2	112. 80
calendar working days per month) Chicago to Aurora and Downers Grove (1 round trip per day,	149.6	1	160.00
calendar working days per month)	117.2	1	137.00
cago Chicago to Aurora, Aurora to Downers Grove, Shabbona to Chicago and return (1 round trip per day, calendar	97.0	1	119.90
working days per month)	134.0	1	171.45
day, calendar working days per month)	74.8	1	(1 2)

			1
	Rate	Joint express, bag-	
Runs from—	Collectors.	Brake- men.	gage, and brake- men.
Chicago to Riverside (4 round trips per day, calendar working days			
per month)	\$85.00	<b>\$7</b> 0.00	\$77.45
day, calendar working days per month) Chicago to Downers Grove(3round trips per	85.00	70.00	77.45
day, calendar working days per month) Chicago to Aurora (1 round trip per day,	96.00	76.00	90.00
calendar working days per month)	85.00	70.00	80.00
calendar working days per month)	110.00	(3)	105.00
calendar working days per month)	96.00	76.00	90.00

Run.	Brakemen.	Joint ex- press, bag- gage, and brakemen.
Chicago to Downers Grove (2 round trips daily)	\$72.00	\$77.45
Chicago to Downers Grove (3 round trips daily)	76.00	90.00
Chicago to Aurora (1 round trip daily)	72.00	80, 00
Chicago to Aurora (2 round trips daily)		105, 00
Chicago to Aurora to		100.00
Downers Grove (1 round trip daily)	76.00	90.00

When vacancies occur in conductor-ships on suburban trains, the said vacan-cies are to be filled by appointment of men as follows: Three freight conductors; one collector; continuing in that way; all such suburban men to be eligible to promotion to through runs. All collectors in suburban service who are extra conductors as of December 1, 1912, will be handled under this rule. After these men are assigned to regular places as conductors, the rule to be void and promotion to be governed by general seniority rules; provided, however, that all trainmen engaged in suburban service will be placed on Aurora seniority list from date of en-tering service. Rule 42 (a) shall not ap-ply and the rates above specified include compensation for all work connected with and incidental to the suburban service.

Includes amount paid by express company.
 Includes \$11 paid by railroad company for handling milk at platform, Chicago.
 Grews pooled.

## QUESTION 15—Continued.

PROPOSAL.

AWARD.

View Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the C			
	Rat mo	Joint express,	
Runs from—	Collectors.	Brake- men.	gage, and brake- men.
Downers Grove to Chicago, Chicago to Riverside, Riverside to Chicago. Chicago to Aurora, Aurora to Downers Grove, Shabbona to Chicago and return (1 round	\$89. <b>9</b> 3	\$75.19	•••••
trip per day, calendar working days per month)	<sup>1</sup> 110. 00		{2\$92.70 87.20
day, calendar working days per month)	110.00		³ 85. 00

<sup>1</sup> Baggagemen.

<sup>2</sup> Flagmen. Includes \$5.50 for handling express and baggage, Shabbona-Aurora. <sup>3</sup> Baggagemen's helper from Aurora to Chicago

and return.

When vacancies occur in conductorships on surburban trains, the said va-cancies are to be filled by appointment of men as follows: Three freight con-ductors, one collector, continuing in that way, all such surburban to be eligible to promotion to through runs. All collectors in surburban service who are extra conductors as of December 1, 1912, will be handled under the foregoing rule: After these men are assigned to regular places as conductors the rule to be void and promotion to be governed by general seniority rules, provided, however, that all trainmen engaged in surburban service will be placed on Aurora seniority list from date entering service.

Unless otherwise provided, passenger rules will govern all special allowances incidental to surburban service.

## QUESTION 16.

Mixed train service: A combination of passenger and freight service in one train will be classed as mixed trains and conductors paid 4.25 cents per mile and brakemen 2.83 cents per mile, 100 miles or less, 10 hours or less, to constitute a day, overtime pro rata. Where a trainman handles baggage or express, he will receive \$15 per month in addition to his regular pay.

It is understood under the above rule if the crew handles local merchandise or does station switching they will be considered a way freight train and receive a way freight rate, except as follows:

MIXED TRAIN SERVICE AND MISCELLA-NEOUS RUNS.

#### AURORA DIVISION.

Forreston, Oregon, and Rochelle run, two round trips per day, calendar working days per month; conductors, \$117.98; brakemen, \$76.23. Brakemen allowed one and one-half hours at the rate of 32.5 cents per hour for switching at Forreston.

Conductors paid 47.5 cents per hour and brakemen paid 32.5 cents per hour for switching at Oregon.

# QUESTION 16-Continued.

PROPOSAL.

AWARD.

AURORA DIVISION.

Forreston and Oregon run to be paid as shown on page 25 of old schedule and footnote. 12

## LA CROSSE DIVISION.

Winona and East Winona: Day conductors \$110 and brakemen \$75 per month, 10 hours to constitute a day, overtime pro rata.

Winona and East Winona: Night conductors \$110 and brakemen \$75 per month, 10 hours to constitute a day,

overtime pro rata.

Dubuque and East Dubuque: Day conductors \$110 and brakemen \$75 per month, 10 hours to constitute a day, overtime pro rata.

Dubuque and East Dubuque: Night conductors \$110 and brakemen \$75 per month, 10 hours to constitute a day, overtime pro rata.

Galena and Galena Junction: Day conductors \$110 and brakemen \$75 per month, 10 hours to constitute a day,

overtime pro rata.

Galena and Galena Junction: Night conductors \$110 and brakemen \$75 per month, 10 hours to constitute a day, overtime pro rata.

#### BURLINGTON DIVISION.

Tracey and Oskaloosa run, two round trips on passenger, one round trip on freight; calendar working days per month. Conductors \$120.50, brakemen \$72.50 per month. If crew is required to do extra work or make extra trip, they will be paid extra at established rates for such work performed.

## SHABBONA MILE RUN, 134 MILES.

For calendar working days per month: Conductor \$171.45, flagman \$87.20—\$5.50 additional for handling express and bag-Shabbona-Aurora. Baggagemen \$109.20—Aurora to Chicago. Includes amount paid by express company and \$11 paid by railroad company for handling milk at platform Chicago. Baggageman's helper \$81.45—Aurora to Chicago and return, one round trip per day.

#### LA CROSSE DIVISION.

Winona and East Winona: Day conductors \$110 and brakemen \$72.50 per calendar month. Twelve hours constitute a day's work. Time for lunch al-

Winona and East Winona: Night conductors \$110 and brakemen \$72.50 per calendar month. Twelve hour's constitute a day's work. Time for lunch allowed. Night brakemen to be paid

extra for coaling engine as at present.

Dubuque and East Dubuque: Day conductors \$110 and brakemen \$72.50 per calendar month. Twelve hours constitute a day's work. Time for lunch al-

lowed.

Dubuque and East Dubuque: Night conductors \$110 and brakemen \$72.50 per calendar month. Twelve hours constitute a day's work. Time for lunch al-

Galena and Galena Junction: Day conductors <sup>3</sup> \$110 and brakemen \$72.50 per calendar month. Twelve hours constitute a day's work. Time for lunch allowed.

Galena and Galena Junction: Night 3 conductors \$110 and brakemen 4 \$72.50 per calendar month. Twelve hours constitute a day's work. Time for lunch allowed.

#### BURLINGTON DIVISION.

Tracev and Oskaloosa run: Two round trips on passenger, one round trip on freight; calendar working days per Conductors \$120.50, brakemen month. \$72.50 per month.

<sup>&</sup>lt;sup>1</sup> Brakemen allowed 1½ hours at rate of 31.9 cents per hour for switching at Forreston. Conductors paid 47.3 cents per hour and brakemen paid 31.9 cents per hour for switching at Oregon.

<sup>2</sup> On page 25 of the schedule of rules and rates of pay for trainmen, of Sept. 1, 1902, and amended to Dec.

<sup>3</sup> 1916, the Forreston to Oregon run (2 round trips per day, calendar working days per month) is entered:

<sup>4</sup> 2 miles run; number of crews, 1; conductors, \$117.98 per month; brakemen, \$76.23 per month."

<sup>5</sup> Includes amount paid by express company.

<sup>4</sup> Night brakemen on Galena branch run shall also act as night operator at Galena.

## QUESTION 16-Continued.

#### PROPOSAL.

#### CENTERVILLE DIVISION:

Centerville, Carrollton, and return. Sunday only. Conductors \$6.60 per day and brakemen \$3.85 per day.

Clarinda and Shenandoah, 5 cents per mile for conductors and 3.45 cents per mile for brakemen, including switching at Clarinda and Shenandoah, 100 miles

or less, 10 hours or less to constitute a

#### HANNIBAL DIVISION.

Hannibal and Louisiana run: Conductors \$118.58 and brakemen \$76,23 per month, including switching during day, 10 hours or less, 100 miles or less, to constitute a day.

Old Monroe, Francis, and return, Mondays, Wednesdays, and Fridays. Conductors, \$88 per month; brakemen, \$58.66 per month; to be paid extra for making up train at both ends of run at overtime rates for way freights.

#### ST. JOSEPH DIVISION.

Leavenworth stub: Conductors, \$110 per month; baggagemen and brakemen \$75.00 per month; extra pay for switching at Armour and Leavenworth, overtime after 10 hours pro rata.

Atchison stub: Conductors, \$110 per month; baggagemen and brakemen, \$75 per month. Extra pay for switching at Armour and Leavenworth, overtime after 10 hours pro rata.

Station switching at Villisca by St. Joseph division crews will be paid for at 50 cents per hour for conductors and 34.5 cents for brakemen.

## LINCOLN DIVISION.

Greely Center and Erickson, daily except Sunday. Conductors, \$4.25 per day; brakemen, \$2.83 per day, minimum of 100 miles or less, 10 hours or less to constitute a day; overtime pro rata.

## AWARD.

CENTERVILLE DIVISION.

Centerville, Carrollton, and return, Sunday only. Conductors \$6.60 per day, brakemen \$3.85 per day.

#### HANNIBAL DIVISION.

Hannibal, Louisiana, and return: Conductors \$118.58 and brakemen \$76.23 per calendar working day month, including switching and work service during the

Old Monroe, Francis, and return, Mondays, Wednesdays, and Fridays. Conductors \$88 and brakemen \$58.66 per month. Paid extra for making up trains at both ends of run.

#### ST. JOSEPH DIVISION.

Leavenworth stub: Conductors, \$110 per month; baggagemen 1 and brakemen, \$72.50 per calendar month.

Paid extra for switching at turn-around points at \$0.385 for conductor and \$0.253

for trainmen per hour.

Atchison stub, for day crews: Conductor, \$110 per calendar month; baggageman 1 and brakeman, \$72.50 per calendar month. If required to do switching will be paid for at rate of 38.5 cents per hour for conductor and 25.3 cents per hour for brakeman.

# QUESTION 16-Continued.

PROPOSAL.

AWARD.

For night crews: Conductors \$110 per calendar month, baggagemen 1 and brakemen \$72.50 per calendar month. Extra pay for switching at Armour and unloading merchandise at Armour and Winthrop at rates for conductors of 38.5 cents per hour and for baggagemen and brakemen 25.3 cents per hour

Station switching at Villisca by St. Joseph division crews will be paid for at 47.5 cents per hour for conductors and 32.5

cents per hour for brakemen.

#### LINCOLN DIVISION.

Greeley Center-Erickson, daily except Sunday: Conductors <sup>2</sup> \$4.5375, brakemen \$3.146 per day. No extra compensation for switching. Pay for extra trips or construction service.

#### WYMORE DIVISION.

Nebraska City and Payne: Conductors \$115, brakemen (yardmen) bridge run.

Table Rock and Lincoln: Conductors 4.25 cents per mile and brakemen 2.83 cents per mile, allowing one hour's switching on No. 119 at Table Rock.

Superior and Edgar, two round trips: Conductors \$121 per month, brakemen \$81.07 per month. Pay for all switching at Superior and Edgar except work of making up their train, overtime pro rata after 11 hours and 20 minutes; above rate on basis of 26 days per month.

#### ALLIANCE DIVISION.

Hot Springs and Minnekahta mixed run: Conductors \$125.24 per month, brakemen \$84.70 per month; pro rata extra trips. Minimum of 100 miles for all trips; all assigned territory at through freight rates.

## SHERIDAN DIVISION.

Frannie and Cody, two round trips daily except Sunday: Conductors \$154, head brakemen \$90.15, rear brakemen \$103.07 per month. One hour's switching allowed at Cody.

#### WYMORE DIVISION.

Nebraska City and Payne, bridge run: Conductors \$115; brakemen (yardmen). Month of 26 working days.

Table Rock and Lincoln, trains Nos. 119 and 120, round trip: Conductors \$127.05 and brakemen \$87.73 per month.

Table Rock. Month of 26 working days.
Superior and Edgar, two round trips:
Conductors \$121, and brakemen \$81.07
per month of 26 working days. Extra pay
for switching at initial and turn-around points.

#### ALLIANCE DIVISION.

Minnekahta and Hot Springs: Conductor \$125.24, and brakeman \$84.70 per month. Brakeman acts as express and baggage man. Actual mileage at through freight rates to be paid for extra trips on assigned territory, and actual miles or hours at through freight rates when off assigned territory.

#### SHERIDAN DIVISION.

Frannie and Cody; two round trips daily except Sunday. Conductors \$154 and brakemen \$90.15 per month. One hour switching allowed at Cody at way freight rates.

The compensation, basis of payment and allowances of the following runs are determined as indicated below:

Aurora-West Chicago-West Batavia, unchanged. Shabbona-Serena, unchanged. Rockford-Shabbona, unchanged. Sterling-Rock Island-Barstow, for month of calendar working days: Conductor \$145;

Includes amount paid by express company.
 Conductors paid \$5 per month extra for handling express.

## QUESTION 16—Continued.

PROPOSAL.

AWARD.

baggagemen \$85, including amount paid by express company; brakeman \$77.50. Galesburg-West Havana, unchanged. Quincy-Louisiana, unchanged. Canton switch run, unchanged. Hannibal-Ilasco, unchanged. Hannibal-Ilasco, unchanged. Hannibal-Ilasco-Shaleton, unchanged. Keokuk-Mount Pleasant, unchanged. Ottumwa-Fort Madison, unchanged. Burlington-Washington, un-changed. Oskaloosa-Winfield, unchanged. Smoky Hollow Coal Mine run, per day of 10 hours, overtime pro rata: Conductor \$4.40, brakeman \$3.10. Sidney-Carson: Conductor \$145; baggageman \$94, includes amount paid by express company; brakeman \$91. Red Oak-Griswold: Conductor \$142.50; baggageman \$85.01, includes amount paid by express company; brakeman \$77.50. Brookfield-Carrollton and return, unchanged. Napier-Villisca, unchanged. Pacific Junction-Council Bluffs, unchanged. Falls City-Nebraska City-Table Rock, unchanged. Fairmont-Chester, unchanged. Fairmont-Endicott, unchanged. McCook-Imperial, unchanged. Republican-Oberlin rates changed to \$4.40 for conductor and \$3.10 for brakeman. Orleans-St. Francis, rates changed to \$4.40 for conductor and \$3.10 for brakeman. Lincoln-Omaha-Pacific Junction: Brakeman's rate changed to \$78. Daytons Bluff and Minneapolis transfer: Conductor 45.5 cents per hour; brakeman 31.5 cents per hour. Ten hours one day. Overtime pro rata.

Clarinda-Villisca, Villisca - Bigelow, Bigelow-Clarinda (trains 47, Ex. 56-49), 1 crew. Conductor \$137, brakeman \$77.26.1

Clarinda - Bigelow, 2 Bigelow-Villisca, Villisca-Clarinda (trains 50, 48, 55, 89), 1 crew. Conductor \$148.50, brakeman \$87.46.1

Trains 50, 55, 56, 49; baggageman \$86.1 Kirby-Casper-Through freight rates.

Where overtime rates are now specified as \$0.473 and \$0.319 for conductors and trainmen, respectively, they shall be changed to \$0.475 and \$0.325, respectively.

It is the intention that these runs shall be tabulated, and except as above indicated the rates of pay, overtime basis and other allowances and conditions as of February 1, 1914, shall continue.<sup>3</sup>

 <sup>&</sup>lt;sup>1</sup> Includes amount paid by express company.
 <sup>2</sup> Switching at Clarinda will be paid for at 47.5 cents per hour for conductors and 32.5 cents per hour for brakemen.

<sup>&</sup>lt;sup>3</sup> When change is made in the schedule time of any train referred to or tabulated under this rule (52), the overtime basis of which is related to the schedule time of train, the pay will be readjusted on a fair basis. When new runs are established or existing runs changed, the rates of pay will be adjusted on a fair basis after conference between the general manager and the central committee representing the conductors and trainmen.

## QUESTION 17.

PROPOSAL.

AWARD.

Rates of pay. Mountain service.

Edgemont and Deadwood, through freight: Conductor 4.96 cents per mile, brakeman 3.43 cents per mile; way freight conductor 5.55 cents per mile, and brakeman 3.78 cents per mile; 100 miles or less, 10 hours or less to constitute a day, overtime pro rata.

Deadwood to Spearfish, mixed run: Conductor 5 cents per mile, brakeman 3.55 cents per mile; 100 miles or less, 10 hours or less to constitute a day's run;

overtime pro rata.

Mine runs in Black Hills district: Conductor 4.84 cents per mile, brakeman 3.63 cents per mile; 100 miles or less, 10 hours or less to constitute a day; overtime pro

Deadwood and Lead Electric service: Conductor \$4.07 per day; overtime pro

rata after 10 hours

Denver and Lyons branch, through freight: Conductor 4.96 cents per mile, brakeman 3.43 cents per mile; way freight, conductor 5.55 cents per mile, brakeman 3.78 cents per mile; 100 miles or less, 10 hours or less to constitute a day; overtime pro rata.

On the tabulated runs and in mountain service, unless otherwise provided, the rules for overtime or special allowance will govern in the different classes of

service.

ALLIANCE DIVISION AND BLACK HILLS DIS-TRICT.

Through freight, Edgemont and Englewood, 98.5 miles, allow 115 miles. Crews do necessary switching at Hill City without pay. Time allowed for switching at Englewood after one hour. Road over-time to be paid for at through freight overtime rates after 10 hours.

Through freight, Edgemont to Deadwood, 106.9 miles, allow 125 miles. Crews do necessary switching at Hill City without pay. Time allowed for switching at Englewood after one hour. Road overtime to be paid for at through freight overtime rates after 10 hours and 40 min-

Deadwood and Spearfish, 79 miles: Conductors \$125.24, and brakemen \$90.15 per month of 26 days. Brakeman acts as express and baggageman. Month's compensation includes switching. Road overtime paid for at way-freight overtime rates after schedule time of train has been exceeded one hour.

Black Hills and Fort Pierre R. R .-Deadwood and Ruby Basin runs. Conductors \$4.84 and brakemen \$3.63 per day. Ten hours constitutes a day's work.

Overtime pro rata

Edgemont and Englewood, way freight: Conductors \$0.0475 and brakemen \$0.0325 per mile. Overtime at regular wayfreight rates after one hour to be paid on basis of allowed mileage taken at an average speed of 11 miles per hour—98.5 miles, allow 115 miles. Crews do necessary switching at Hill City without pay. Time allowed for switching at Englewood after one hour.

Edgemont and Deadwood, way freight: Conductors \$0.0475 and brakemen \$0.0325 per mile. Overtime at regular wayfreight rates after one hour to be paid on basis of allowed mileage taken at an average speed of 11 miles per hour—106.9 miles, allow 125 miles. Crews do necessary switching at Hill City without pay. Time allowed for switching at Englewood after one hour.

Deadwood and Lead electric service: Conductors, \$122.10 per month; overtime

pro rata after 10 hours per day.

Edgemont and Hill City, round trip,
120.8 miles, allow 140 miles: Crews do
necessary switching at Hill City without pay; overtime at through-freight rates on basis of 10 miles per hour on actual miles

Deadwood and Hill City, round trip, 93 miles, allow 125 miles: Crews do necessary switching without extra pay; overtime after 10 hours at through-freight rate.

QUESTION 17-Continued.

PROPOSAL.

AWARD.

Hill City and Keystone, side trip, 19.1 miles round trip, allow 25 miles: Crews do necessary switching at Hill City without extra pay.

# QUESTION 18.

LOCAL, THROUGH, AND IRREGULAR FREIGHT SERVICE.

Trainmen in local-freight service will be paid, for conductors 5 cents per mile and brakemen 3.45 cents per mile, 100 miles or less, 10 hours or less, to constitute a day; overtime pro rata. Trainmen in local-freight service will be paid as follows: Conductors 4.75 cents per mile and brakemen 3.25 cents per mile, 100 miles or less, 10 hours or less to constitute a day; overtime pro rata. The following way-freight runs are to be tabulated at their present basis of pay, overtime, and other allowances and conditions:

Aurora to Streator. Mendota to Denrock. Galesburg to Peoria. Burlington to Ottumwa. Albia to Creston. Galesburg to Burlington. Creston to Pacific Junction. Brookfield to Centerville. Lincoln to Aurora. Aurora to Burwell. Wymore to Napier. Wymore to Red Cloud. Chester to Fairmont. Wymore to Lincoln. Burlington to Centerville. Keokuk to Centerville. Beardstown to Reo. Hannibal to Burlington. Brookfield to Hannibal. Brookfield to St. Joseph. Kansas City to Cameron Junction. Lincoln to Plattsmouth. Sutton to Alma. Aurora to Ravenna. Table Rock to Lincoln. Edgar to Holdrege. Endicott to Fairmont.

# QUESTION 19.

Local-freight trains are trains that are run for the purpose of doing all way freight between designated terminals. Way-freight work consists of handling short cars, doing station switching, loading and unloading freight.

This proposed rule is denied.

<sup>&</sup>lt;sup>1</sup> The conditions specified in the remarks and under the tabulations on pages 58 and 59 of the schedule of Dec. 29, 1910, to be continued except as in this rule specifically changed.

#### QUESTION 20.

PROPOSAL.

AWARD.

Crews delayed 30 minutes or more at terminals from time ordered to report for duty until train is clear of established terminal limits will be paid for the full delay at overtime rates. In case no terminal time is earned on outgoing trains, road time will begin at time crew is ordered to report for duty. Crews delayed 30 minutes or more after arrival at established terminal limits will be paid for the full delay at overtime rates. In case no terminal time is earned on incoming trains, road time will continue until crew is relieved.

Through-freight crews and way-freight crews paid on mileage basis delayed one hour or more in starting from or after arriving at a terminal will be paid for the full delay.

Time at starting terminal to be computed from time crew is ordered to leave.1

#### QUESTION 21.

Way freight crews paid mileage rates, delayed one hour or more in starting from or after arriving at a terminal will be paid for the full delay. In computing overtime, time allowed under this rule will be deducted to prevent duplicate payThis proposed rule is denied.

### QUESTION 22.

Proposed by company: Way freight crews, paid monthly rates, will be allowed full overtime at 47.3 and 31.9 cents per hour, respectively, for conductors and brakemen, including terminal delays, when schedule time is exceeded one hour.

Way freight crews paid monthly rates will be allowed full overtime at 47.5 and 32.5 cents per hour for conductors and brakemen, respectively, including terminal delays, when schedule time is exceeded one hour.

#### QUESTION 23.

Proposed by company: When freights are annulled and through freights are required to do way freight work, such as unloading freight at stations and doing station switching other than picking up and setting out cars they will be paid way freight rates for the whole or that portion of the trip for which the way freight train has been annulled. If for any reason other than annulment of a way freight train, way freight work is done by a through freight train, the actual time used in doing such way freight work shall be paid for at hourly rates.

In computing overtime, time allowed under this rule will be deducted to prevent duplicate payments.

When way freights are annulled and through freights are required to do way freight work, such as loading or unloading freight at stations or doing station switching other than picking up and setting out cars, they will be paid way freight rates for the whole or that portion of the trip for which the way freight train has been annulled. If for any reason other than the annulment of a way freight train, way freight work is done by a through freight train, the actual miles run or time used in such work shall be paid for at way freight rates.

In computing overtime, time allowed under this rule will be deducted to prevent duplicate payments.2

¹ The rule in the schedule in effect prior to this arbitration covering this point is rule 2), under "Through-freight service," and reads: "Crews delayed one hour or more in starting from or after arriving at a terminal

freight service," and reads: "Crews delayed one hour or more in starting from or after arriving at a terminal will be paid for the full delay."

The rule in effect in the schedule prior to this arbitration covering this point is rule 45 under "Way freight runs" and reads: "When way freights are annulled and through freights are required to do way freight work, such as unloading freight at stations and doing station switching other than picking up and setting out cars, they will be paid way freight rates for the whole or that portion of the trip for which the way freight train has been annulled. If for any reason other than annulment of a way freight train, way freight work is done by a through freight train, the actual time in doing such way freight work shall be paid for at hourly rates."

# QUESTION 24.

#### PROPOSAL.

# AWARD.

Proposed by company: Freight crews required to do switching or other work at terminals will be paid full time, providing the time exceeds 30 minutes, except when pay is arranged to suit such

Freight crews required to do switching or other work at terminals will be paid full time, providing the time exceeds 15 minutes.

This rule is interpreted to mean that tabulated runs that heretofore paid extra for terminal switching shall continue to pay on the same basis, otherwise this rule will not apply to the tabulated runs.1

# QUESTION 25.

A crew required to do switching or other work at terminals will be paid full time for such service as per rule 14, as agreed to June 27, 1913.

This proposed rule is denied.

# QUESTION 26.

On turn-around trips, if the time consumed at the turning point is two hours or more, crew will be paid for all time at the turning point in addition to all other time earned.

This proposed rule is denied.

#### QUESTION 27.

Overtime pro rata will be paid for all time used to complete a trip in excess of a rate of speed of 10 miles per hour, time to be computed as per rule 14.

This proposed rule is denied.

# QUESTION 28.

In freight service overtime pro rata will be paid for all time used to complete a trip in excess of a rate of speed of 10 miles per hour, time to be computed from the time crew is ordered to leave initial terminal until relieved at destination.

In freight service, except as otherwise provided in tabulated runs, overtime pro rata will be paid for all time used to complete a trip in excess of a rate of speed of 10 miles per hour, time to be computed from the time crew is ordered to leave initial terminal point until relieved at destination.2

### QUESTION 29.

Crews in through and irregular freight service, required to load or unload merchandise, or to do station switching, or place cars for other trains, or to set out cars on more than one track, or to load or unload stock or material, or to rebrass, ice, or weigh cars, or to replace derailed cars, or chain up cars set out by other trains, will be paid for such work at regular overtime rates. Time consumed in performing one or more of the above-mentioned classes of service at or between different points to be cumulative. Crews required to clean or sand stock cars, or to load or unload

Crews in through and irregular freight service required to clean or sand stock cars, or to rebrass, chain up, or replace derailed cars set out or derailed by other trains, or to put up coal at any point will be paid at their overtime rate for the actual time consumed. Switching incidental to work paid for under this rule will be included in the time of such work.3

3 This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration.

¹ The rule in effect in the schedule prior to this arbitration covering this point is rule 36 under "Through freight service," and reads: "A crew required to do switching or other work at terminals will be paid full time, providing the time exceeds 30 minutes, except when pay is arranged to include such service." ¹ The rule in effect in the schedule prior to this arbitration covering this point is rule 29 under "Through freight service," and reads: "Overtime prorata will be paid for all time used to complete a trip in excess of a rate of speed of 10 miles per hour, time to be computed from the time crew is ordered to leave initial terminal until relieved at destination." ³ This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration.

# QUESTION 29—Continued.

PROPOSAL.

AWARD.

stock at intermediate points or terminals, will be paid for actual time consumed, at their overtime rates in addition to trip.

# QUESTION 30.

Crews in through and irregular freight service, consuming two hours or more picking up or setting out cars between the terminals of their runs, will be paid local freight rates for such trips, the only time to be counted under this article is that necessarily required in doing the work. It is understood that short cars will be handled on way freight trains, however, if through and irregular freights are rerequired to handle short cars, they will be paid for actual time doing such work, if less than two hours, at their regular overtime rates. Stock and perishable freight excepted.

This proposed rule is denied.

# QUESTION 31.

Pool crews will be guaranteed 3,000 miles per month or paid therefor, terminal delay and overtime not to be computed to make up the above mileage. This rule not to operate to prevent pool crews from making more than 3,000 miles per month.

When traffic becomes so light that pool crews can not make 3,000 miles per month This rule the number will be reduced. not to operate to prevent pool crews from making more than 3,000 miles per month.

QUESTION 32.

Pool crews held at their away-fromhome terminal 24 hours or more from time of arrival will be paid 10 hours' pay for each 24 hours so held.

Pool crews will be paid 100 miles for the first 30 hours held at other than their home terminals and 100 miles for each complete 24 hours so held thereafter, except in cases of snow blockades, washouts, or serious wrecks preventing the operation of trains.2

# QUESTION 33.

Assigned crews ready for work will receive a full month's pay, it being understood that no time will be deducted on account of train being annulled for any

Assigned crews ready for work will receive a full month's pay, it being understood that no time will be deducted on account of trains being annulled except on account of snow blockades, washouts, or serious wrecks preventing the operation of trains or on account of the following holidays: New Year's, Fourth of July, Thanksgiving, and Christmas.

('rews may also be used in any other

service to complete guaranty when for any reason regular assignment is discontinued, but such service shall be paid for at the schedule rates, unless the earnings from such rates would be less per day than would have been earned in regular assignment.2

<sup>&</sup>lt;sup>1</sup>The rule in the schedule in effect prior to this arbitration covering this point is rule 35 under "Through freight service," and reads: "Whentraffic becomes so light that reasonable monthly wages can not be made, the number of crews will be reduced. Other things being equal, the men youngest in point of service will be laid off, the superintendent to be the judge as to qualifications.

"It is the intention to so apportion pool crews that they may make not less than approximately 3,000 miles per month."

<sup>&</sup>lt;sup>2</sup> This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration.

# QUESTION 34.

#### PROPOSAL.

# AWARD.

When trainmen are required to shovel coal on to engine or to coal them by means of hand or air hoist, they will be paid for such work at their overtime rates with a minimum of one hour. This in addition to all other time earned on trip. Trainmen will not be required to shovel down coal on tender of engine.

When trainmen are required to shovel coal on to engines or coal them by means of hand hoist they will be paid for such work at their overtime rates. This in addition to all other time earned on trip. Trainmen not actually doing such work will not be paid hereunder.

Trainmen will not be required to shovel

down coal on tender of engine.1

# QUESTION 35.

On all local freight trains, the train crew will consist of not less than one conductor and three brakemen.

Three brakemen will be continued on way freight runs as per the agreement effective December 29, 1910.

# QUESTION 36.

Trainmen in regular work-train service will be paid as follows: Conductors \$115.70 and brakemen \$76.96 per calendar working day month, 10 hours or less to constitute a day, overtime pro rata, actual minutes to be counted. When the total mileage made on any day amounts to more than the hours, the crew will be paid on a mileage basis at through freight rates. Crews to be allowed time to eat meals during working hours without loss of time.

Trainmen in regular work-train service will be paid as follows: Conductors \$113.85 and brakemen \$75.90 per calendar working day month, 10 hours or less to constitute a day, overtime pro rata, actual minutes to be counted. When the total mileage made on any day amounts to more than the hours, the crew will be paid on a mileage basis at through freight rates.

# QUESTION 37.

Where conductors act as foremen or telegraph or telephone operator, or both, or brakemen act as telegraph or telephone operator, \$16.90 per month extra will be allowed. If a conductor is required to oversee any part of the work pertaining to the Maintenance Department, he will be considered a foreman.

Where a trainman is required to act as foreman, or telegraph or telephone operator, or both foreman and operator, payment will be allowed at the rate of \$16.50 per month extra.

Foreman is interpreted to mean a trainman required to oversee and direct maintenance men (other than cable men and workmen opening and closing car doors in connection with unloading trains and other similar work) working without a foreman.2

# QUESTION 38.

If a work-train crew is used in revenue service, they will be paid not less than a minimum of 100 miles at through-freight rates, in addition to a minimum day in work-train service.

If a regular work-train crew is used to pick up or haul other than company freight or work-train cars they will be paid for actual mileage at through-freight rates if such payment would exceed work-train time while so engaged, but shall not be paid a combination of mileage and worktrain time while so engaged.3

¹ This is a new rule, there being nothing similar to it in the schedule in effect prior to this arbitration. ∶The rule in the schedule in effect prior to this arbitration covering this point is a part of rule 39 under the heading "Regular work trains" and reads: "Where conductor acts as foreman or operator, or both, or brakeman acts as operator, \$16.50 per month extra will be allowed." The rule in the schedule in effect prior to this arbitration covering this point is a part of rule 40 under the heading "Regular work trains" and reads: "If used to pick up or haul other than company freight or work-train cars, they will be paid for the actual mileage at through-freight rates."

# QUESTION 39.

# PROPOSAL.

AWARD.

The practice of double-heading freight trains of over 30 cars, exclusive of way car,

will be discontinued, except as follows:
(a) Two engines of Class "A" type may be used on trains on all divisions, with a maximum tonnage of 1,200 tons in one train.

(b) Helping engines may be used to assist trains (way-freight trains excepted) between the following points:
Aurora to Scraper Works.

Wyanet to Neponset. Savanna Yard to Daggetts. Browning to Baders.

Walnut Hill, both ways, on Zearing

Daytons Bluff to Minneapolis. La Salle to Ticona Garden Plain Hill (both ways). Quincy to Ewbanks East Alton to Brighton. Burlington to West Burlington.

Ottumwa to Agency. Burlington to Latty. Lacona to Chariton. Fontanelle to Greenfield. Troy to Whitebreast. Fort Madison to Sawyer. Amazonia to Savanna. Rosendale to Savanna. Conway to Creston.

Chariton to New Cambria. North River to Palmyra Junction.

Bigelow to Maitland

St. Louis to Spanish Lake. Keokuk to Mooar.

Murray to Kansas City. Plattsmouth and Pacific Junction.

Crawford and Belmont.

Lincoln and Seward, via Milford.

Wyola and Sheridan. Brush to Akron. Oxford to Holdrege. All over Black Hills lines. Gibson and South Omaha. Malcolm and Tamora. Wymore and Table Roek (with not to

exceed 1,500 gross tons).
Sheridan and Clearmont (with pusher

from Sheridan to point 3 miles east).
(c) No double-headers will be run except as hereinbefore specified and under the following conditions: In case of storms, accidents, moving engines to and from shops or from one division to another; to expedite stock or perishable freight; but in all cases under this rule the tonnage will not exceed the rating of the largest engine attached.

(d) When by reason of acquirement of additional line or change of grade it becomes necessary, helper service may be established where the conditions are

The practice of double-heading freight trains of over 30 cars, exclusive of way cars, will be discontinued, except as follows:

(a) Two engines of Class "A" type may be used on trains on all divisions, with a maximum tonnage of 1,200 tons in one train

(b) Helping engines may be used to assist trains between the following points:

Aurora to Scraper Works. Wyanet to Neponset. Savanna Yard to Daggetts.

Walnut Hill, both ways, on Zearing

La Salle to Ticona. Garden Plain Hill (both ways). Quincy to Ewbanks. Daytons Bluff to Minneapolis. Browning to Baders. East Alton to Brighton. Burlington to Latty. Fort Madison to Sawyer. Burlington to West Burlington, Ottumwa to Agency. Lacona to Chariton Troy to Whitebreast. Fontanelle to Greenfield. Amazonia to Savanna. Rosendale to Savanna. Conway to Creston.

St. Louis to Spanish Lake. Keokuk to Mooar. Callao to New Cambria.

North River to Palmyra Junction. Bigelow to Maitland

Murray and Kansas City. Plattsmouth and Pacific Junction. Gibson and South Omaha.

Lincoln and Seward, via Milford.

Malcolm and Tamora

Wymore and Table Rock (with not to exceed 1,500 gross tons).

Brush to Akron. Oxford to Holdrege. Crawford and Belmont. All over Black Hills lines. Wyola and Sheridan.

Sheridan and Clearmont (with pusher

from Sheridan to point 3 miles east).

Deer Grove and Van Orin.

Alpha and Lynn.

Creston to Lenox. Aronzville to Concord. Lafayette to Semper. Wray to Akron Edgement to Provo. Ardmore to Orella. Marsland and Girard. Ionia and Sheridan. Corinth and Hardin.

Arvada and Sparta. Alliance to Angora. Bridgeport to Angora.

#### QUESTION 39—Continued.

#### PROPOSAL.

similar to those covered by helper limits as provided above, and if the company desires to establish helper service on acquired lines, or where grade has been changed, shall take the matter up with the officers of the general committee of the Order Railway Conductors and Brotherhood Railroad Trainmen, and no helper district will be established until it is agreed to by the representatives of the

order Railway Conductors and Brother-hood Railroad Trainmen.

(e) Double-header or helper engines will not be used on way freight trains.

(f) If regular helper engines are not established on helper districts named in the foregoing rules, the tonnage of trains will be limited to the rating of the engine handling the train without doubling.

(g) Under no circumstances will a train propelled by a Mallet engine be doubleheaded or helped with over 30 cars except from Sheridan, Wyo., to point 3 miles east.

(h) In case of an accident to any engine, consolidation may be effected with another train and the consolidated train brought into terminal as double-header.

(i) All helper or pusher engines will be accompanied by a conductor, who will be paid \$90 per month, calendar working days to constitute a month, 10 hours or less to constitute a day; overtime pro rata.

AWARD.

Bridgeport to Dalton. Sterling to Peetz. Sidney to Lorenzo. Sidney and Marlowe. East Bridger and Warren Summitt. Kane and Warren Summitt. Minnscola and Boyson. Booneville to Arminto.

Guernsey to 2 miles west to east end of first tunnel Bona to Cassa both ways into

Additional helper districts may be established by the company to take over any single grade the tonnage which any single engine handling the train may bring to the foot of that grade (by the foot of the grade is meant a convenient station near the foot of the grade at which the helper engine may be taken care of), but only after 30 days' notice by the company to the general committee of the Order Railway Conductors and Brother-hood Railroad Trainmen and an opportunity for a conference between the general manager of the company and the organizations for the purpose of consid-

ering the matter.
(c) No double-headers will be run except as hereinbefore specified and under the following conditions: In cases of storms, accidents, to avoid running engines light, moving engines to and from shops, or from one division to another; to expedite stock or perishable freight; but in all cases under this rule the tonnage will not exceed the rating of the largest

engine attached.

(d) No way freight trains will be double-headed except where there is but one freight train each way daily, and then only under restrictions hereinbefore stated.1

#### APPLICATION OF AWARD.

In order to show the practical results of the arbitration, a comparison of the rates of pay of conductors and trainmen on the Chicago, Burlington & Quincy Railroad, before and after the award, is presented in the following table:

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration.

	Conductors. Increase.		se.	Brakemen.		Increase.		
Class of service.		1914	Amount.	Per cent.	1910	1914	Amount.	Per cent
Through freight, per mile	Cents. 4. 18	Cents. 4. 18	Cents. 0.00	0.00	Cents. 2.783	Cents. 2.783	Cents. 0.00	0.00

<sup>&</sup>lt;sup>1</sup> Nothing in the above rules in regard to limiting tonnage or length of train to be handled by double-headers or otherwise shall be construed so as in any way to limit or establish a precedent as to the proper or safe length of train to be handled by one engine.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration.

	Condu	ctors.	Increas	е.	Baggag	gemen.	Increase.	
Average rate per month for specified runs.	1910	1914	Amount.	Per cent.	1910	1914	Amount.	Per cent.
Passenger service:1								
Illinois district, Au-	\$149.90	\$153.30	<b>\$</b> 3.40	2.3	\$87.23	\$87.23	\$0.00	0.0
Illinois district, Gales- burg division	146.30	148. 82	2.52	1.7	83. 44	83. 98	. 54	0.6
Iowa district, Burling- ton division	126. 83	134. 20	7.37	5.8	73. 54	80. 85	7.31	9.9
Iowa district, Ottum- wa division	149. 78	152. 53	2. 75	1.8	80. 68	83. 41	2.73	3. 4
lowa district, Creston		149. 23			81.38	82. 69	1.31	
division	149. 23		.00	.0				1.6
wille division	155. 84	158. 39	2.55	1.6	80.32	82.96	2.64	3, 3
Beardstown division. Missouri district, Han-	148. 50	154. 73	6. 23	4.2	85. 25	85. 25	.00	.0
nibal division Missouri district, Brookfield division	161. 97	161.97	.00	.0	91.63	92.16	. 53	. 6
Brookfield division Missouri district, St.	150. 26	155. 44	5. 18	3. 4	79.86	84.60	4. 74	5.9
Joseph division	147. 00	148. 79	1.79	1.2	87. 20	89. 50	2.30	2.6
Nebraska district, Omaha division	141.62	144.52	2.90	2.0				
Nebraska district, Lin- coln division	136. 18	144. 54	8.36	6.1				
Nebraska district, Wy- more division	138. 10	141. 49	3. 39	2.5				
Nebraska district, Mc- Cook division	138. 83	142.37	3. 54	2.5				
Wyoming district, Ste ling division	148. 50	152.83	4. 33	2.9	j			
Wyoming district, Al- liance division	156.75	157.30	. 55	.4			·	
Wyoming district, Sheridan di ision	156, 75	160.00	3, 25	2.0	1			
Suburban service:	100.70	100.00	0.20	2.0			1	
Chicago to Downer's	119.90	124 90	5.00	4.2				
Chicago to Aurora and	132.00	136.40	4. 40	3.3				
Downer's Grove Way freight:2	132.00 125.79	137. 00 125. 79	5.00	3.8				
Mixed train service— Winona to East								
Winona	101. 75	110.00	8.25	8.1				
Dubuque Galena to Galena	96.25	110.00	13.75	14.3				
Junction	103. 40 115. 50	110.00 120.50	6. 60 5. 00	6.4				
Tracy to Oskaloosa. Leavenworth stub.	103.40	110.00	6.60	4.3 6.4	64. 19	72.50	8.31	12.9
Atchison stub Sterling, Rock Is-	103. 40	110.00	6.60	6.4	63. 10	72.50	9. 40	14.9
land, and Bar-	137. 50	145. 00	7.50	5.5	81. 95	85.00	3. 05	3.7
stow Smoky Hollow Coal Mine run,			,					
per day	3.80	4. 40	.60	15.8				
and return	137. 50	145.00	7.50	5.5	88. 97	94.00	5.03	5.7
Red Oak to Gris- wold	137. 50	142.50	5.00	3.6				
Republican and Oberlin, per day	4.18	4. 40	.22	5.3				
Orleans and St.								

<sup>1</sup>Under rates fixed in 1913, the minimum rates of pay of passenger trainmen are as follows: Conductors \$134.20 per month, baggagemen \$80.85 per month, and brakemen and flagmen \$74.90 per month.

<sup>2</sup> Full overtime was allowed under 1910 rules at the rate of 47.3 cents per hour for conductors and 31.9 cents per hour for brakemen. Under 1914 rules, as a result of the arbitration, conductors were granted 4.75 cents and brakemen 3.25 cents per mile, 100 miles or less, 10 hours or less: while monthly paid way freights (full overtime) were raised to 47.5 cents per hour for conductors and 32.5 cents per hour for brakemen on overtime.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration—Continued.

A reporte not a non month	Condu	ictors.	Increas	е.	Bagga	gemen.	Increa	se.
Average rate per month for specified runs.	1910	1914	Amount.	Per cent.	1910	1914	Amount.	Per cent.
Way freight—Continued.  Mixed train service— Continued.  Dayton's Bluff and Minneapolis Transfer, per day. Clarinda to Villisca, Villisca to Bigelow, Bigelow to Clarinda	\$4. 24 132. 00	\$4.55 137.00	\$0.31 5.00	7.3	•			
Edgemont and Englewood, Edgemont and Deadwood, per mile	. 045375	.0475	. 002125	4.7				
	Brakemen.		Increas	e.	Flag	men.	Increa	se.
Average rate per month for specified runs.	1910	1914	Amount.	Per cent.	1910	1914	Amount.	Per cent.
Passenger service:1								
Illinois district, Au- rora division	\$71.60	<b>\$</b> 75. 75	\$4.15	5.8	\$75,66	\$75.75	\$0.09	0.1
Illinois district, Gales- burg di ision	72.46	74. 95	2.49	3.4	74.80	74.90	.10	.1
Iowa district, Burling- ton division	64.21	74.90	10.69	16.6				
Iowa district, Ottum- wa division	68. 97	74.90	<b>5.</b> 93	8.6	74. 80	74.90	.10	.1
Iowa district, Creston division	71. 77	74. 90	3.13	4. 4	80. 85	80.85	00	.0
ville division	73. 20	76.33	3.13	4.3				
Missouri district, Beardstown division.	72.87	75. 95	3.08	4.2	74.80	75.00	. 20	.3
Missouri district, Han- nibal division	74.38	74.90	.52	.7	80.85	80.85	.00	.0
Missouri district, Brookfield division	72.82	74.92	2.10	2.9	80.85	80.85	.00	.0
Missouri district, St. Joseph division	69.61	75. 76	6.15	8.8	77.82	77.87	. 05	.1
Nebraska district, Omaha division	71. 74	75, 88	4. 14	5.8	77.82	77.87	. 05	.1
Nebraska district, Lin- coln division	72.52	76.90	4.38	6.0	79.75	80.85	1.10	1.4
Nebraska district, Wy- more division Nebraska district, Mc-	76.14	76.22	.08	. 1	80.85	80. 85	. 60	.0
Cook division Wyoming district,	76. 45	77.45	1.00	1.3	80.85	80.85	.00	.0
Sterling division Wyoming district, Al-	79.38	81.50	2.12	2.7				
liance division W yoming district,	80.30	80.30	.00	.0				
Sheridan division Suburban service: Chicago to Downer's	80. 85	82.93	2.08	2.6	84. 15	84.15	.00	.0
Grove	70.68	74.00	3.32	4.7				
Downer's Grove	73. 70	70.00	2.30	3.1				

<sup>&</sup>lt;sup>1</sup> Under rates fixed in 1913, the minimum rates of pay of passenger trainmen are as follows: Conductors \$134.20 per month, baggagemen \$80.85 per month, and brakemen and flagmen \$74.90 per month.

Amount and per cent of increase in rates of pay of conductors and trainmen as a result of the award of the board of arbitration—Continued.

	Brake	emen.	Increas	е.	Flag	men.	Increa	se.
Average rate per month for specified runs.	1910	1914	Amount.	Per cent.	1910	1914	Amount.	Per cent.
Way freight:	\$86.54	\$86.54	\$0.00	0.0				
Winona to East Winona	70. 40	72.50	2.10	3.0				
Dubuque to East Dubuque Galena to Galena	70.40	72.50	2.10	3.0		• • • • • • • •		
Junction. Tracy to Oskaloosa. Leavenworth stub. Atchison stub. Sterling, Rock Is-	70. 40 66. 00 62. 70 62. 70	72.50 72.50 72.50 72.50 72.50	2. 10 6. 50 9. 80 9. 80	9.8				
land and Bar- stow	74. 80	77. 50	2.70	3.6			 	
Coal Mine Run, per day	2.53	3. 10	. 57	22.5				
and return Red Oak to Gris-	85. 97	91.00	5. 03	5. 9				
wold	73. 15	77. 50	4. 35					
Oberlin, per day Orleans and St.	2.94	3. 10	. 16	5.4				
Francis, per day Lincoln, Omaha, Pacific Junction	2.94	3. 10 78. 00	. 16 3. 20	1				
Dayton's Bluff and Minneapolis Transfer, per day. Clarinda to Villis-	2.90	3. 15	. 25	8.6				
ca, Villisca to Bigelow, Bigelow to Clarinda Edgemont and Englewood,	74. 26	77. 26	3.00	4.0				
Edgemont and Deadwood, per mile	. 03146	. 0325	. 00104	3.3	•••••			
Average rate per month for specified runs.			Increase.		Joint express, baggage, and brakemen.		Increase.	
for specified runs.	1910	1914	Amount.	Per cent.	1910	1914	Amount.	Per cent.

Average rate per month for specified runs.	Collectors.		Increase.		baggage, and brakemen.		Increase.	
to specified runs.	1910	1914	Amount.	Per cent.	1910	1914	Amount.	Per cent.
Suburban service: Chicago to Downer's Grove. Chicago to Aurora. Chicago to Aurora and Downer's Grove.	\$86.90 92.95	\$90.50 97.50	\$3.60 4.55 3.05	4. 1 4. 9 3. 3	\$80. 85 86. 90 86. 90	\$83. 73 92. 50 90. 00	\$2. 88 5. 60 3. 10	3.6 6.4 3.6

<sup>1</sup> Full overtime was allowed under 1910 rules at the rate of 47.3 cents per hour for conductors and 31.9 cents per hour for brakemin. Under 1914 rules, as a result of the arbitration, conductors were granted 4.75 cents and brakemin 3.25 cents per mile, 100 miles or less, 10 hours or less; while monthly paid way freights (full overtime) were raised to 47.5 cents per hour for conductors and 32.5 cents per hour for brakemen on overtime.

A study of the preceding table shows that increases in rates of pay, based on the average rate per month for specified runs, were gained by conductors and trainmen in certain important services on the Chicago, Burlington & Quincy Railroad. The exceptions were in the through and way freight services, where no increases were granted.

In the passenger service conductors gained small increases on 15 out of 17 divisions. Brakemen received increases on 16 divisions in this service. On 8 out of 10 divisions on which baggagemen were employed in the passenger service increases in rates of pay were granted. Very small increases were gained by flagmen, no change being made on 6 out of 13 divisions.

Conductors in the suburban service gained from 3.3 per cent to 4.2 per cent in rates of pay, while brakemen, collectors, and joint express baggage and brakemen were granted increases in very nearly

the same proportions.

The conductors, brakemen, and baggagemen employed in the mixedtrain service received relatively higher percentages of increases in rates of pay than was granted in any of the other services. Conductors, for instance, were given increases ranging from 3.6 per cent to 15.8 per The increases granted baggagemen ranged from 3.7 per cent to The brakemen received increases of from 3 per cent 14.9 per cent. to 22.5 per cent.

# XIX.

# WHEELING & LAKE ERIE, WABASH-PITTSBURGH TERMINAL, AND WEST SIDE BELT RAILROADS AND TELEGRAPHERS, TELEPHONERS, STATION AGENTS, AND SIGNALMEN: 1913.

The movement which resulted in the arbitration proceedings reviewed in the following pages represented an effort of approximately 191 telegraphers in the employ of the Wheeling & Lake Erie, Wabash-Pittsburgh Terminal, and the West Side Belt Railroads to secure a revision of the rules governing working conditions and a general increase in rates of pay. Stipulations for arbitration were agreed to November 7, 1913, and provided that the board of arbitration should consist of six members; that hearings should be held in Cleveland, Ohio; that the award should be made within 30 days from the beginning of hearings and should become effective as of December 1, 1913. Acting under this agreement the employees selected as arbitrators, S. J. Konenkamp, international president of the Commercial Telegraphers Union of America, and D. G. Ramsay, an attorney. The railroads selected D. R. Webner, trainmaster of the Wheeling & Lake Erie, and H. B. Chapman, also an attorney, and the membership of the board was completed by the appointment, as neutral members, of attorneys Alexander Hadden and James R. Garfield. The board was organized on December 29 with Mr. Hadden as chairman. Public hearings were held December 29 to 31, inclusive, and the arbitration award was announced January 13, 1914.

#### DEMANDS OF THE EMPLOYEES.

The stipulations respecting conditions of employment proposed by the employees involved practically the entire structure of rules and rate of pay in effect on the three railroads, and were presented to the board of arbitration in a series of articles designated by the numbers 1 to 17, inclusive. Article 1 embodied a proposed definition of the word telegrapher; articles 2 to 4, 7 to 9, 11 to 12, and 14 to 16, inclusive, related to working conditions, and articles 5, 6, and 10 to rates of pay for certain special duties and for work performed after the expiration of the regular hours of service. Article 13 embodied a request for the establishment of a minimum wage scale for telegraphers of \$65 per month, and in article 17 the employees requested a general increase in rates of pay of 15 per cent.

The testimony submitted to the board of arbitration included in addition to oral statements and depositions a series of 20 exhibits presented by the railroads and 17 exhibits introduced by the employees. Following the presentation of testimony oral arguments were made by representatives of the railroads and the telegraphers.

#### FINDINGS OF THE BOARD OF ARBITRATION.

The findings of the board of arbitration concerning the proposed changes in the wage scale were set forth in the concluding section of the award and, as pointed out in greater detail below, involved an average increase in the rates of pay of the employees concerned in the movement of \$4.46, or 6.4 per cent, as compared with their request for a general increase of 15 per cent. With respect to the rules governing working conditions, compensation for special duties, overtime and minimum rates of pay, the findings of the board, as a whole, were also favorable to the employees, the proposed rules, with modifications in certain details, being granted by the award.

The detailed requests of the employees as compared with the award of the board of arbitration are shown below, the articles of the requests, and the award with respect to each article being shown

in parallel columns.

PROPOSALS OF EMPLOYEES.

AWARD.

# ARTICLE I.

Employees required to perform telegraph service of any character or duration, agent-telegraphers, telephoners, agent-telephoners, whose duties include the handling of train orders or the blocking of trains by telephone, and any other employees included in the schedule of wages will be considered telegraphers within the meaning of this agreement, irrespective of title by which designated or character of service performed.

All telegraphers, agent - telegraphers, telephoners, agent-telephoners, and all employees of similar or lower grades required to perform telegraph or telephone service, whose duties include the handling of train orders or the blocking of trains, and any other employees included in the schedule of wages will be considered telegraphers within the meaning of this agreement, irrespective of title by which designated or character of service performed.

#### ARTICLE II.

(a) In three or more trick offices 8 consecutive hours shall constitute a day's work.

(b) In two-trick offices where the service is directly in connection with the movement of trains 9 consecutive hours

shall constitute a day's work.

(c) In one-trick offices, and also in twotrick offices not connected with the movement of trains, 10 hours, exclusive of meal hour, shall constitute a day's work.

(d) In these offices hours shall begin between 6 and 8 a. m. or 6 and 8 p. m., and the meal hour shall commence between 11 a. m. and 12.30 p. m., or between 11 p. m. and 12.30 a. m.

(e) Employees not released for meals within the time limits named will be allowed 1 hour overtime on that account and 30 minutes for meals at the first

opportunity.

(f) Except as relieved for meals the

10 hours shall be consecutive.

(a) In three or more trick offices 8 consecutive hours shall constitute a day's

(b) In two-trick offices where the service is directly in connection with the movement of trains 9 consecutive hours shall constitute a day's work.

(c) In one-trick offices, and also in twotrick offices not connected with the movement of trains, 10 hours, exclusive of meal hour, shall constitute a day's

(d) The meal hour shall commence between 11 a. m. and 12.30 p. m., or between 11 p. m. and 12.30 a. m.

(e) Employees not released for meals within the time limits named will be allowed 1 hour overtime on that account and 30 minutes for meals at the first opportunity

(f) Except as relieved for meals the 10

hours shall be consecutive.

Article III was entitled "Promotion rights" and contained 13 paragraphs, designated by the letters of the alphabet (a) to (m), inclusive. Of the various proposals presented in this article the stipulations contained in paragraphs (b), (d), (e), and (f) differed in no material respect from preexisting rules governing promotion and were continued by the arbitration award without controversy. A review of the record also shows that the rules proposed by the employees under paragraphs (a) and (g) to (l), inclusive, were conceded by the railroad company during the negotiations which preceded the arbitration, and that a unanimous award was made with respect to the stipulations contained in these paragraphs. The controversy under this article was thus confined to paragraphs (c) and (m), as follows:

#### PROPOSAL OF EMPLOYEES.

#### ARTICLE III.

(c) When vacancies occur or new positions are created, they will be advertised within 15 days for a period of 7 days and will be filled within 15 days thereafter.

(m) Men for appointive agencies will be chosen from official seniority list of

telegraphers.

(c) When vacancies occur or new positions are created, they will be advertised within 15 days for a period of 7 days and will be filled within 15 days thereafter.

(m) Men for appointive agencies will be chosen from official seniority list of telegraphers, so far as practicable to do so.

#### ARTICLE IV.

A seniority list, including all employees who hold rights as telegraphers, will be kept on file in office of the superintendent, will be corrected on January 1 and July 1 of each year and will be open to inspection by telegraphers interested. The local chairman will be furnished copies.

A seniority list, including all employees who hold rights as telegraphers, will be kept on file in office of the superintendent, will be corrected on January 1 and July 1 of each year and will be open to inspection by telegraphers interested. The local chairman will be furnished copies.

#### ARTICLE V.

(a) Telegraphers required to remain on duty after the expiration of regular hours for any service whatsoever will be paid overtime at the rate of 35 cents per hour, except when regular rate exceeds the overtime rate, in which case overtime rate will be paid pro rata.

(b) In computing overtime 30 minutes and less than 60 minutes shall be counted 1 hour; less than 30 minutes shall not be

(c) Telegraphers summoned for duty outside of assigned hours will be allowed 50 cents for the first hour or fraction thereof and 35 cents per hour thereafter.

(a) Telegraphers required to remain on duty after the expiration of regular hours for any service whatever will be paid overtime at the rate of 30 cents per hour for the first hour and after that 35 cents per hour, except where regular rate exceeds overtime rate; in which case over-time rate will be paid pro rata. As amended, Garfield, Hadden, Konenkamp, Ramsay, 4-votes favorable; Chapman, Webner, 2 votes opposed.

(b) In computing overtime 30 minutes and less than 60 minutes shall be counted 1 hour; less than 30 minutes shall not be

counted.

(c) Telegraphers summoned for duty outside of assigned hours will be allowed 50 cents for the first hour or fraction thereof and 35 cents per hour thereafter.

#### ARTICLE VI.

Telegraphers performing service at wrecks, washouts, or other similar emergency offices will receive a minimum of \$3.50 per day of 10 hours or less, and overtime at the same rate, time to be computed from the time called for at the regular place of employment until the return thereto.

Telegraphers performing service at wrecks, washouts, or other similar emergency offices will receive a minimum of \$3 per day of 10 hours or less, and overtime at the same rate, time to be computed from the time called for at the regular place of employment until the return thereto. As amended, vote unanimous.

#### PROPOSAL OF EMPLOYEES.

ARTICLE VII.

When employees covered by this schedule are transferred or accept a bulletined position they will be furnished free transportation for themselves wholly dependent members of their families, and effects, and will be allowed pay while making transfer, rate of pay to be based on position from which transfer is made.

When telegraphers regularly employed and covered by this schedule are transferred or accept a bulletined position they will be furnished free transportation for themselves, wholly dependent members of their families, and all effects when legally permissible, and will be allowed pay for time necessary to make transfer, rate of pay to be based on position from which transfer is made.

AWARD.

#### ARTICLE VIII.

Telegraphers attending court or inquests by instructions of the company will be paid full salary for the time lost and reasonable expenses if away from home. If no time is lost, actual time at overtime rates will be allowed while so engaged.

Telegraphers attending court or inquests by instruction of the company will be paid full salary for the time lost and reasonable expenses if away from home. If no time is lost, actual time at overtime rates will be allowed while so engaged. The company shall receive the witness fees.

# ARTICLE IX.

Telegraphers will not be suspended, removed, or dismissed from the service of the company without just cause; in case of a suspension, removal, or discharge, or being held out of a position entitled to, he may, if he so desires, have a thorough investigation by the proper officer. Such desire shall be signified in writing within 10 days of the date of suspension, removal, or discharge, or being held out of a posi-tion entitled to, and the investigation shall begin as soon as possible, but within 10 days of date of such notice, and proceed with as little delay as possible until completed. The telegrapher shall have full opportunity to present his case and offer testimony and may be accompanied by a fellow employee. If the suspension, dismissal, or being held out of position entitled to is found to have been without just cause, the employee shall be reinstated

and paid for time lost.

Telegraphers shall have the right to appeal any case to the higher officials in their regular order up to and including

the general manager.

Telegraphers will not be suspended, removed, or dismissed from the service of the company without just cause. In case of suspension, removal, or discharge of a telegrapher he may, if he desires, have a thorough investigation by the proper officer. Such desire shall be signified in writing within 10 days of the date of suspension, removal, or discharge, and the investigation will be begun as soon as possible, but within 10 days of the date of such notice, and proceed with as little interruption as possible until completed. The telegrapher shall have full opportunity to present his case and offer testimony and may be accompanied by a fellow employee. If the suspension, removal, or dismissal is found to have been without just cause, the employee shall be reinstated and paid for time lost.

Telegraphers will have the right to appeal any case to the higher officials in their regular order up to and including the general manager.

# ARTICLE X.

Telegraphers will not be required to scrub waiting rooms, offices, or outbuildings, and where telegraphers are required to attend one, or not to exceed two, switch lamps, or handle switches, crossing targets or crossing gates operated outside of offices, will be allowed \$5 per month extra compensation. Where telegraphers are required to handle over two switch lamps they will be paid \$1 per month for each additional lamp.

Telegraphers will not be required to scrub waiting rooms, offices, or outbuildings, and where telegraphers are required to attend one, or not to exceed two, switch lamps, or handle switches, crossing targets, or crossing gates operated outside of offices, will be allowed \$5 per month extra compensation. Where telegraphers are required to handle over two switch lamps they will be paid \$1 per month for each additional lamp.

#### PROPOSAL OF EMPLOYEES.

AWARD.

#### ARTICLE XI.

Telegraphers who have been in the service of the company 2 years or more shall have 15 days' annual vacation with pay or in lieu thereof 15 days' pay.

Vacation periods will be advertised

during the first quarter of each year and will be granted according to seniority.

Vacations to start May 1 of each year.

Telegraphers shall have annual vacations with pay as follows: Those who have been in the service of the company more than 1 year, and less than 2 years, 7 days; and those over 2 years, 12 days, or in lieu thereof pay for those respective periods when required by the company to forego such vacations. Vacation periods shall be requested during January of each year, and will be granted according to seniority. Vacations are to start April 1 of each year.

# ARTICLE XII.1

Telegraphers will not be required to teach telegraphy or receive students into their offices, nor will they be permitted to receive students into their offices without permission from the superintendent.

. Telegraphers will not be required to teach telegraphy or receive students into their offices, nor will they be permitted to receive students into their offices without permission from the superintendent.

#### ARTICLE XIII.

Minimum rate of pay for telegraphers will be \$65 per month.

Minimum rate of pay for telegraphers will be \$65 per month.

#### ARTICLE XIV.

Telegraphers who are not agents but are required to give bond will not be required to pay premium on such bond.

Telegraphers who are not agents but are required to give bond wil! not be required to pay premium on such bond.

#### ARTICLE XV.

Telegraphers at Homestead, Norwalk Yard, Lodi, Harmon, Brewster, Sherrodsville, Adena, Pine Valley, Hopedale, Rook, Coal Docks, Canton, and Run Junction will not be required to take care of batteries. Telegraphers at Homestead, Norwalk Yard, Lodi, Harmon, Brewster, Sherrodsville, Adena, Pine Valley, Hopedale, Rook, Coal Docks, Canton, and Run Junction, and all other offices where there are more than eight cells, will not be required to take care of batteries.

#### ARTICLE XVI.

Annual system passes will be furnished telegraphers who have been in the service one year or more; their wives shall receive an annual system pass after any telegrapher has been in the service three years or more.

Annual system passes will be furnished telegraphers who have been in the service one year or more.

Article XVII contained a request of the employees for a general increase of 15 per cent in rates of pay. The finding of the board of arbitration in response to this request is presented in the award in the form of a statement of the various positions embraced in the so-called telegraphers' schedule, accompanied by a statement of rates of pay established by the board for the employees filling the respective

<sup>1</sup> This article was identical with preexisting rule and was continued by the arbitration award without controversy.

positions. The wage scale established as a result of the award under this article involved an increase in rates of pay for approximately 86 per cent of the employees of \$5 per month, these increases ranging on a percentage basis from 4.8 to 7.7 per cent. In addition to these increases, an advance in rates of pay of \$2.50 per month was secured by approximately 7 per cent of the employees, these advances ranging from 2.9 to 3.8 per cent.

## APPLICATION OF THE AWARD.

(a) Rates of pay.—The finding of the board of arbitration involved, in addition to the increase in the wage scale awarded under Article XVII of the arbitration agreement, an increase in the rates of pay for work performed by telegraphers after the expiration of the regular hours of service, an increase in rates of pay for certain special services and special duties, and an increase in the minimum wage scale.

As a result of the award of the board of arbitration under Article V, the rate of pay for services performed after the expiration of the regular hours of duty was increased from 25 cents per hour to a rate of 30 cents for the first hour and 35 cents per hour thereafter, an increase of 5 cents, or 20 per cent, and 10 cents, or 40 per cent, per hour, respectively, as compared with the rates in effect before the arbitration. In the case of telegraphers summoned for duty outside of assigned hours the rate of 35 cents for each hour after the first hour awarded by the board of arbitration represents an increase of 10 cents per hour, or 40 per cent, as compared with the rate in effect before the award.

A comparison of the rates of pay in effect before and after the arbitration in the case of telegraphers performing service at wrecks, washouts, or other similar emergency offices shows an increase in the rates of compensation allowed for such services from \$2.50 to \$3 per day, or 20 per cent, with a proportionate increase in the overtime rate.

Under the rule in effect before the arbitration the payment of compensation for so-called special duties was confined to an allowance of \$5 per month in the case of telegraphers required to attend one or more switch lamps. This rule, as indicated above, was changed by the award so as to require the payment of the extra compensation of \$5 in the case of telegraphers required to attend one, or not to exceed two, switch lamps, or handle switches, crossing targets, or crossing gates operated outside of offices, with a stipulation for the payment of \$1 per month for each additional lamp in the case of telegraphers required to handle over two switch lamps.

In addition to the increases in rates of pay for special and overtime work involved in the award of the board of arbitration, as noted above, a minimum wage scale of \$65 per month was established by the award as compared with \$60 per month before the arbitration, an increase

of \$5 per month, or 8.3 per cent.

The following statement shows the number of employees earning each specified rate of pay in effect before and after the award of the board of arbitration and the amount and per cent of increase in rates of compensation secured by such employees as a result of the award of the board under Article XVII.

Amount and per cent of increase in rates of pay of railroad telegraphers as a result of the award of the board of arbitration.

Number	Per cent	Rate per	month.	Incr	ease.
of employees earning each specified rate.	specified number is of total	Before arbitra- tion.	After arbitra- tion.	Amount.	Per cent.
6 3 66 3 1 5 67 3 1 1 6 6 177 1 5 5 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.15 1.57 34.55 1.57 .52 2.62 35.08 1.57 .52 .52 3.15 8.91 .52 2.62 2.62 1.57 .52 .52 1.57 .52	\$65. 00 65. 00 65. 00 67. 50 70. 00 70. 00 70. 00 72. 50 75. 00 75. 00 75. 00 80. 00 85. 00 85. 00 95. 00	\$65. 00 67. 50 70. 00 72. 50 70. 00 72. 50 70. 00 75. 00 75. 00 77. 50 77. 50 80. 00 82. 50 85. 00 87. 50 90. 00 110. 00	\$0.00 2.50 5.00 .00 .00 .00 2.50 5.00 .00 2.50 5.00 2.50 5.00 2.50 5.00 2.50 5.00 2.50 5.00	0. 0 3. 8 7. 7. 4 0 0 7. 1 3. 4 6. 9 0 3. 3 6. 7 3. 1 6. 3 2. 9 5. 3 4. 8

		rate per ath.	Iner	Increase.		
	Before arbitra- tion.	After arbitra- tion.	Amount.	Per cent.		
Total number of employees, 191. Total number of employees receiving increase, 178.	\$69. 62 69. 73	\$74. 08 74. 53	\$4. 46 4. 80	6. 4 7. 0		

From this statement it will be seen that the rates of pay of 66 employees were increased from \$65 per month before the award to \$70 per month under the wage scale subsequently adopted, an increase of \$5 per month, or 7.7 per cent. The rates of compensation of 67 employees, who were earning \$70 per month before the award, were increased to a rate of \$75 per month, an advance of 7.1 per cent. Increases of 6.7 per cent were received by 17 employees, whose rates of pay were advanced from \$75 to \$80 per month. From a comparison of the schedules of rates of pay in effect before and after the award it also appears that no change in rates of pay was made in the case of 6 employees earning \$65 and 5 who earned \$70 per month.

Considered in the aggregate the average increase in rates of pay of all employees, weighted according to the number earning each specified rate, was from an average monthly rate of \$69.62 before the award to an average rate of \$74.08 under the wage scale subsequently adopted, an average increase of \$4.46 per month, or 6.4 per cent. Eliminating from the comparison the employees who according to the schedules available for this analysis received no increases or decreases in salary, the average increase was from \$69.73 to \$74.53, an increase

of \$4.80, or 7 per cent.

(b) Working conditions.—A comparison of the official schedule of rules of employment in effect before and after the arbitration shows

that the arbitration award resulted in material changes in the rules governing working conditions, these changes involving the basis of a day's work, care of batteries, promotion rights, vacations, passes, and

other special duties and privileges.

Under the rule in effect before the arbitration, the basis of a day's work in telegraph offices operated as day or night offices only was fixed at 12 consecutive hours, inclusive of meal hour, and in offices operated continuously at 9 hours. The rule awarded by the board of arbitration as shown above stipulates that in one-trick offices, and also in two-trick offices not connected with the movement of trains, 10 hours, exclusive of meal hour; in two-trick offices where the service is directly in connection with the movement of trains, 9 consecutive hours; and in three or more trick offices, 8 consecutive hours shall constitute a day's work.

In connection with the reduction in hours of service awarded by the board under this article, the award stipulates that the meal hour of telegraphers in 10-hour offices shall commence between 11 a.m. and 12.30 p.m., or between 11 p.m. and 12.30 a.m., as compared with a meal hour commencing between 11 o'clock and 1 o'clock, day or night, for telegraphers whose hours of duty exceeded 9 hours per day,

under the rule in effect before the award.

As a further result of the arbitration, the rule in effect prior to the award requiring vacancies or new positions to be advertised within 15 days for a period of 7 days, and filled thereafter as soon as possible, was changed so as to require such vacancies to be filled within 15 days after being so advertised. The award also provides, among other new rules with respect to promotion, that men for appointive agencies will be chosen from official seniority list of telegraphers, as far as

practicable to do so.

The stipulation embodied in the arbitration award with respect to annual vacations with pay also represented a concession of material advantage to the employees, the privilege of vacation with pay under the rule in effect before the arbitration having been confined to telegraphers who had been in the service of the company for one year or more, filling 12-hour positions with telegraph duties, and the vacation period having been limited to 7 days. The rule awarded by the board of arbitration extends the vacation privileges to all employees included within the definition of the word telegrapher, and the vacation period is increased after the second year of service from 7 to 12 days.

The findings of the board of arbitration further involved a modification of the rule in effect before the award respecting the conditions under which employees should be furnished annual system passes, this rule having limited the granting of such passes to regular telegraphers who had been in the service two years or more and had a

clear record for the previous year.

As a result of the award the rule was so amended as to provide that annual system passes should be furnished telegraphers after one year of service, irrespective of the former stipulation concerning the em-

plovee's record.

In addition to the foregoing, the stipulations contained in the arbitration award exempting telegraphers at the stations designated in Article XV from taking care of batteries, represented a specific concession made to the employees in the form of improved working conditions, as a result of the arbitration.

# SOUTHERN RAILWAY AND MAINTENANCE-OF-WAY EMPLOYEES: 1913.

Arbitration in the case under review concerned requests for increased rates of pay presented to the Southern Railway Co. by a joint protective board representing approximately 2,784 maintenance-of-way employees in the service of the railroad.

# DEMANDS OF EMPLOYEES.

The following wage increases were requested: All foremen, \$4 per month; bridgemen, carpenters, masons, painters, pile-driver engineers,  $7\frac{1}{2}$  per cent; section and extra gang apprentices, 10 cents per

day.

Arbitration was agreed to November 13, 1913, and hearings were conducted and a decision rendered by the board of arbitration in Washington, D. C., December 17. The board was composed of H. A. Herbert, lawyer; D. W. Lum, a maintenance-of-way engineer of the Southern Railway; and T. H. Gerry, general chairman of the

organization of maintenance-of-way employees.

In support of the requests of the employees it was urged in brief that the wage advances which they had previously received had not been commensurate with the increase in the cost of living, nor with wage increases secured by laborers in other occupations. It was also contended that the rates of pay of the employees involved in the arbitration were relatively low compared with the wage scale prevailing in other employments.

#### FINDINGS OF THE BOARD OF ARBITRATION.

As a result of the award of the board of arbitration extra gang foremen received a wage increase of \$4 per month and the rates of pay of apprentices were increased 10 cents per day. The wage increases proposed for other classes of maintenance-of-way employees were disallowed, arbitrators H. A. Herbert and D. W. Lum con-

curring in the award, and arbitrator T. H. Gerry dissenting.

In rendering its decision reference was made by the board to the railroad's plea of financial inability to increase the wages of maintenance-of-way employees; to the increase in the cost of living during the period January, 1910, to July, 1913, as compared with wage increases granted the employees during the same period; and to the rates of pay received by foremen employed by the Southern Railway as compared with the wage rates of foremen employed on other railroads in the same territory.

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After declaring that the responsibility of railroad employees and the risks which they incurred should be considered, the board declared that—

Considering the present financial straits of the railway company, we do not feel at liberty to award to the employees the highest rates being paid in the same territory for similar services, but only such rates as shall seem to be fair averages when compared with rates being paid for like services on near-by roads.

With respect to the increased cost of living, the board in its decision recited that the employees had received wage increases on May 1, 1911, and on May 1, 1912, and that these increases, in the aggregate, had exceeded the increase in the cost of living during

the period January, 1910, to July, 1913.

Comparing the rates of pay of section foremen employed on the various railroads in southern territory, the board found that 6 railroads paid their section foremen somewhat higher rates than were paid on the Southern Railway, and that 5 paid the same rate or less, and that the Southern paid a higher rate per mile for supervision than was paid by any other of 14 railroads considered, with the exception of the Louisville & Nashville. In the case of yard foremen, the board found that the rates paid by the Southern were higher than the rates paid such employees on 6 out of 11 railroads considered. Comparing the rates of pay of extra gang foremen on 10 railroads, the board pointed out that the average rates of pay of such employees were higher on 6 of these railroads than the rates paid by the Southern Railway.

In connection with the wage increase awarded apprentices, the board reviewed briefly the status of these employees, stating that they were selected because of their capacity to become foremen, that in numbers as compared to foremen they were about as 1 to 4, and that as foremen, according to the evidence, did not often voluntarily vacate their places, promotion for apprentices was neces-

sarily slow.

#### APPLICATION OF THE AWARD.

The wage increases awarded by the board of arbitration, as noted above, were confined to an increase of \$4 per month in the rates of pay of extra gang foremen, and an increase of 10 cents per day in the wages of apprentices. In a review of the monthly earnings of extra gang foremen on various railroads in southern territory, the board of arbitration, in its findings, stated that the average earnings of such employees on the Southern Railway were \$70.11 per month. On this basis, the average increase in the rates of pay of these employees as a result of the arbitration, stated in the form of a percentage, was 5.7 per cent. In the case of apprentices, the increase was from an average rate of \$1.50 per day before the award to an average rate after the award of \$1.60, an increase of 6.7 per cent.

# XXI.

# NEW YORK, CHICAGO & ST. LOUIS RAILROAD AND TELEG-RAPHERS, STATION AGENTS, AND SIGNALMEN: 1914.

The employees involved in this arbitration included approximately 260 telegraphers, station agents, and signalmen, who were represented in the arbitration proceedings by the Order of Railroad Telegraphers. Stipulations for the arbitration were signed February 5, 1914, and embraced a series of articles presented to the railroad company by the employees, requesting a wage increase and certain changes in working conditions. The board of arbitration was composed of Julian W. Mack, judge of the United States District Court of the Northern District of Illinois, as chairman; J. A. Gordon, general superintendent of the Chicago Great Western Railroad Co., selected by the employer; and D. G. Ramsay, a lawyer of Chicago, Ill., selected by the employees. The first hearing was held by the board at Chicago, May 25, 1914, and the arbitration award was announced June 13, 1914.

#### DEMANDS OF THE EMPLOYEES.

The demands of the employees were presented to the board of arbitration in a series of seven articles, three of which related to the rate of pay for regular and overtime work, and four to working conditions.

The proposed changes in rates of pay involved a wage increase of 15 per cent, the payment of 15 per cent commission on Western Union Telegraph business, and an increase in the rate of pay for over-

time work from 30 to 40 cents per hour.

Stipulations respecting conditions of employment involved the adoption of rules requiring all vacancies in agency positions to be bulletined to all offices at time such vacancies occurred, without restriction, overtime pay for all Sunday work; in one-man positions 10 consecutive hours, including meal hour, and in positions employing two or more men, 8 hours, respectively, to constitute a day's work, and an allowance of \$1 per day for expenses to regularly assigned telegraphers when used at other than their regular offices.

The following item was submitted to the board as a grievance:

The management agrees to take up with the connecting lines at Green Springs Junction and McComb for the vacation allowances for the years 1912 and 1913, but refuses to take up with the Vandalia, at Hibbard, claiming that this road will not participate in the allowance for vacation.

#### FINDINGS OF THE BOARD OF ARBITRATION.

In response to the request for an increase of 15 per cent in wages the board declined to award a flat percentage increase of any amount, but found that the employees, on account of the character of their services, were entitled to a minimum wage scale of \$65 per month and awarded that such minimum wage scale should be adopted. For overtime work the board awarded a rate of 30 cents per hour for the first two hours and 35 cents per hour thereafter. The board pointed out that Western Union or commercial telegraph business was performed within the regular hours of service and fell within the scope of the duties of the employees and declined to award a commission on such business.

With respect to the posting of vacancies, the board ordered the adoption of a rule requiring such vacancies to be bulletined for 7 days at the time of their occurrence, applications to be made within 10 days, and the position to be filled within 20 days after the date of bulletin. The basis of a day's work in one-man positions was fixed at 11 consecutive hours, including meal hour; in two-trick offices at 9 consecutive hours, including meal hour; and in three or more trick offices at 8 consecutive hours, without any meal hour.

Respecting the request for an expense allowance of \$1 per day for regularly assigned telegraphers when used at other than their regular offices, the board stipulated that \$1 per day expense money should not be paid in case of a transfer to another office within the same city or town, but awarded a rule requiring the company to pay any additional expense actually and reasonably incurred by such employee not exceeding \$1 per day in case of such transfer.

In lieu of the rule requested by the employees providing for overtime pay for work performed on Sunday, the board directed that overtime be allowed for all Sunday work performed in excess of 6 con-

With respect to the grievances specified by the employees the board found that the vacation allowances at Green Springs Junction and McComb for 1913 and for the future had been adjusted. The board recommended that the company insist upon the Vandalia Railroad paying the claim for the vacation allowance for the years 1912 and 1913 and for the future.

In a memoranda of dissent from the findings of the board of arbitration with respect to the minimum wage scale arbitrator J. A. Gordon stated that his signature was attached to the award as testifying that it was the findings of the majority, but not as an expression of his own convictions on the wage increase. Objection was also expressed by Mr. Gordon to the award of the board with respect to the basis of a day's work for service performed on Sunday.

Arbitrator D. G. Ramsay in a memoranda of dissent expressed the belief that the board should have granted a commission of 15 per cent on Western Union business, and a further wage increase of 15 per cent especially to the employees not benefited by the award of the minimum wage scale of \$65. Mr. Ramsay also expressed the belief that the telegraphers should have been granted the request for overtime for all work performed on Sunday.

#### APPLICATION OF THE AWARD.

(a) Rates of pay.—The table presented below gives the number of telegraphers in the service of the railroad at the time of the arbitration, the number and per cent receiving an increase in wages as a result of the arbitration award establishing a minimum wage scale of \$65 per month, and the minimum, maximum, and average amount

and per cent of increase. The basis of the statistical presentation consists of the printed schedules issued by the railroad company showing the rules and rates of pay in effect immediately before and after the award.

It will be noted from the table that 98 employees, or 26.5 per cent, received an increase in wages, these increases ranging from a minimum of \$1.25, or 2 per cent, to a maximum of \$14, or 27.5 per cent per month. The weighted average rate of pay for all employees earning less than \$65 per month before the arbitration was \$61.19, and the weighted average increase was \$3.81, or 6.2 per cent.

Tendence	Rate per month be- fore arbitration of	Increase.		
Employees.	employees receiving wage increases.	Amount.	Per cent.	
Total number 260 Number receiving increase. 98 Per cent receiving increase. 26.5	1 \$51, 00 2 63, 75 3 61, 19	\$14.00 1.25 3.81	27. 5 2. 0 6. 2	

<sup>1</sup> Minimum.

In addition to the wage increases noted above, the rates of pay of all telegraphers for overtime work after the second hour were increased as a result of the arbitration award from 30 to 35 cents per

hour, or 16.7 per cent.

(b) Working conditions.—Changes in working conditions as a result of the arbitration award included a reduction in the regular hours of service per day in one-man positions from 12 to 11 consecutive hours, including meal hour, and a stipulation for the payment of overtime after 6 hours service on Sunday as compared with overtime payments for Sunday work on the same basis as week-day overtime prior to the award. The employees also gained the advantage of a rule requiring the company to bulletin all vacancies in agency positions at the time such vacancies occur, as contrasted with the former rule under which the company bulletined only such positions as in its judgment could not in the interest of the company be filled by the employees occupying schedule positions.

The rule awarded by the board of arbitration relative to the expense allowance of regularly assigned telegraphers transferred to work extra in another office in the same town or city provided for the payment by the company of the necessary expenses of such telegraphers not to exceed \$1 per day. The rule in force prior to the award provided for an expense allowance of \$1 per day in the case of regularly assigned telegraphers transferred from their regular positions to work extra, but did not expressly stipulate that such allowance should be paid in case of a transfer to another office within

the same town or city.

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<sup>&</sup>lt;sup>2</sup> Maximum.

<sup>3</sup> Weighted average.

# XXII.

# GEORGIA & FLORIDA RAILROAD AND BROTHERHOOD OF LOCOMOTIVE ENGINEERS AND BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN: 1914.

The arbitration case reviewed in this section involved approximately 58 engineers, firemen, and hostlers in the service of the Georgia & Florida Railway, and was the result of a joint movement by those employees to secure certain changes in working conditions and an increase in rates of pay. Stipulations for arbitration were signed by the parties, March 21, 1914, the employees being represented by officials of the Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen and Enginemen. The arbitration board was composed as follows:

Stanton J. Peele, judge, United States Court of Claims, appointed

by the United States Board of Mediation and Conciliation.

A. W. Anderson, general manager Charleston & Western Carolina Railway, selected by employer.

L. S. Davis, general chairman Brotherhood of Locomotive Engineers

selected by employees.

The board was organized with Judge Peele as chairman, and held its first session at Augusta, Ga., April 28, 1914. The arbitration award was rendered May 9, and was made retroactive so as to take effect March 1, 1914.

#### DEMANDS OF EMPLOYEES.

The wage scale proposed by the employees involved increases in the rate of pay of locomotive engineers in the various branches of service, ranging from 11 per cent in local freight to 16.7 per cent in passenger service, and in the case of overtime, increases of from 13 per cent in branch service to 25 per cent in passenger, freight, and mixed train service.

The wage scale proposed for firemen involved a slightly greater percentage of increase over existing rates than was requested for engineers, rates of pay equivalent to 55 per cent of engineers' rates being requested for firemen as compared with 50 per cent under the

existing wage scale.

In the case of hostlers an increase of approximately 8 per cent in rates of pay for work performed during the regular hours of service and 20 per cent in the rates of pay for overtime work was requested.

In connection with the proposed wage scale submitted to arbitration the requests of the employees contained stipulations involving an increase in the rates of pay allowed engineers and firemen for attending court as witnesses to give evidence for the company, and a stipulation for the payment of compensation at overtime rates to these employees when held for 28 hours or over at other than home terminals without performing service. The proposed rules governing working conditions included stipulations relating to rest at terminals, changes in runs, etc.

#### FINDINGS OF THE BOARD OF ARBITRATION.

The conclusions presented in the arbitration award concerning the testimony submitted during the proceedings related on the one hand to the financial condition of the Georgia & Florida Railroad, and on the other to comparative rates of pay and conditions of service on

this and other railroads operating in the southeastern States.

In view of the showing made as to the financial status of the company, and its conceded inability to earn its operating expenses, arbitrator Anderson contended that no wage increase should be granted and dissented from the conclusion of the majority members of the board that the requests of the employees for an increase in rates of pay should be determined by the rates paid by other roads in the same section of the country for like services. As reviewed by arbitrators Peele and Davis the evidence showed that the average basic rate per 100 miles for engineers, firemen, and hostlers on over 20 railroads operating in the southeast section was 15 per cent higher than the rate paid by the Georgia & Florida Railroad to such em-With respect to character of service, size of engines in cylinders, tonnage of trains, and the various conditions conforting the employees in the operation of trains, it was further held that there was no material difference between such conditions on the other railroads and on the Georgia & Florida, except that on the latter there was less tonnage in freight service.

Because of the conditions so found to exist, the board of arbitration, Mr. Anderson dissenting, awarded increases in the rates of pay of engineers and firemen, ranging in passenger, freight, mixed, and work train service from 10 to 13.3 per cent. In switching service an increase of approximately 8 per cent was awarded, a slightly greater

increase being granted in the rates of pay of hostlers.

With modifications in certain details, the several rules proposed by the employees, respecting working conditions, compensation for attending court, etc., with one exception were granted by the board of of arbitration by a unanimous vote.

#### EXCEPTIONS TO THE ARBITRATION AWARD.

Upon the filing of the arbitration award in the clerk's office of the district in which the controversy arose, as required by law, the findings of the board of arbitration with respect to the proposed wage increase were made the subject of judicial review as authorized by section 11 of the arbitration act, the railroad company within the time prescribed interposing certain exceptions to the legality of the award.

Under these exceptions it was urged that the fact that other railroads in the same territory were paying better wages for similar services was not sufficient of itself to authorize an increase in the wages of the employees in question, and that there was no evidence that such an increase was otherwise proper. It was further urged that there was no evidence showing what wages were being paid to the same class of employees by all the other roads in the same territory nor the average of such wages.

It was admitted that there was "some evidence" as to what wages were paid by some of the other roads in the same territory, but the

evidence showed, it was insisted, that there was a marked difference in the different roads, especially between the smaller and the larger roads.

It was also urged that the award failed to show that there was an existing prevailing wage on such roads which was adopted by the arbitrators, and that it showed affirmatively that they considered the average of only a limited number of roads and failed to show that they considered in this average the wages on the shorter roads.

The exceptions presented by the railroad were heard in the United States District Court for the Northeastern Division of the Southern Division of Georgia, and on the 18th day of July, 1914, by order of the court, were overruled and a motion for judgment upon the award was ordered granted. Upon appeal by the railroad to the United States circuit court of appeals the judgment of the district court was affirmed the appellate court in its opinion reciting that "the arbitrators are called to find and make an award, and are not called to give reasons or arguments on either law or the facts."

#### THE AWARD IN DETAIL.

The various rules governing working conditions, special duties, etc., proposed by the employees as compared with the findings of the board of arbitration are shown below, the requests of the employees and the award being shown in parallel columns.

REQUESTS OF ENGINEERS, FIREMEN, AND HOSTLERS.

AWARD OF THE BOARD OF ARBITRATION.

1. Engineers and firemen attending court as witnesses, or appearing before proper persons to give legal evidence for the company shall be paid as follows: All roads and work train engineers will be paid \$8 per day; all road and work train firemen will be paid \$5 per day; switch engineers will be paid \$7 per day; and switch firemen \$4 per day for each day lost on this account. These rates to apply on lay-over days when engineers or firemen are required to go away from home on this account. When attending court during their lay-over at home, engineers will be paid \$5 per day, and firemen will be paid \$2.75 per day. The company will furnish necessary transportation, and will be entitled to the certificate for witness fees in all cases.

2. When held at other than designated home terminals, without performing service 28 hours, engineers and firemen will be paid overtime rates, 10 hours to be the minimum for the first 28 hours so held, and minimum of 10 hours for each 24 hours so held thereafter, except in cases of men assigned to regular runs or when the laws prohibit the running of trains on Sunday interferes, or for days when the line is broken through an act of Providence.

1. Engineers and firemen attending court or appearing before proper parties to give evidence for the company will be paid the amount they would have earned had they remained on their engines plus \$2 per day for expenses when required to go away from home terminals. Engineers and firemen required to attend court during their lay-over will be allowed a minimum day's pay for the class of service in which engaged. Extra engineers and firemen will be allowed a minimum day's pay for the class of service in which engaged plus \$2 per day for expenses when required to go away from home terminals. All engineers and firemen will be furnished transportation and the company will be entitled to witness certificates in all cases.

2. Engineers and firemen in unassigned service held more than 28 hours at other than designated home terminals without performing service are to be paid overtime rates as follows: Ten hours for the first 28 hours. Ten hours for the first 24 hours after the lapse of 28 hours, and 10 hours additional time for each complete 24 hours so held thereafter, provided that this regulation does not apply to engineers delayed by reason of compliance with the law or obstruction of the line through an act of Providence.

REQUESTS OF ENGINEERS, FIREMEN, AND AWARD OF THE BOARD OF ARBITRATION. HOSTLERS.

3. Through freight or mixed trains that pick up or set off cars other than at junction points will be paid for at local freight rates for the entire trip. This does not apply to picking up or setting off cars loaded with perishable freight, but does apply to melon cars. When trains in through freight or mixed service are required to stop at any one station between terminals in excess of 45 minutes for the purpose of switching, engineers and firemen will be paid a minimum of 1 hour at overtime rates. This will not be deducted from road overtime.

4. Engineers and firemen will be entitled to 10 hours rest when they come in off their runs, provided they ask for it. Rest to be counted from the time they

register in until they are called.

5. A change of time-table does not create a vacancy or change conditions unless there is 20 miles or more added to, or taken from, the mileage of the run or terminals, or lay-over runs changed; in such case the engineers will be allowed preference of runs in accordance with their seniority. Engineers or firemen in passenger service will not be required to run over 200 miles in one day, or one trip, unless in case of emergency. Engineers or firemen run around through no fault of their own, except to protect wreck trains, will be paid for time lost. Engineers and firemen on schedule straightaway runs, if turned around before reaching terminals, will be paid 100 miles in each direction.

6. In passenger service engineers will

be paid for 100 miles or less \$3.50.

7. Engineers in through freight or mixed will be paid for 100 miles or less, \$4.25.

- 8. Engineers in local freight service will be paid for 100 miles or less, \$5.
- 9. In work train service engineers will be paid 10 hours or less, \$4.25.
- 10. In switching service engineers will be paid 10 hours or less, \$3.75.
- II. In branch service engineers will be paid on Broxton branch, 12 hours or less, \$4; Millen branch, 12 hours or less, \$4.75; Moultrie branch, 12 hours or less, \$4.75.

4. Engineers and firemen may claim 10 hours rest after they have been on duty 12 hours and completed their run, provided they ask for it. Rest time to be computed from the time they register

until they are relieved.

5. A change of time-table does not create a vacancy or change conditions unless there is 20 miles added to or taken from the mileage of the run or terminal or lay-over of such run changed; in such cases engineers will be allowed preference of runs in accordance with their seniority. Engineers and firemen run around through no fault of their own, except to protect wreck trains, will be paid for time lost.

6. Passenger service: Rate per mile, all engines, 3.40 cents; overtime, 50 cents per hour. A minimum of \$4 will be paid engineers in passenger service and \$2 for firemen in passenger service when miles allowed at the prescribed rate per mile for passenger service does not exceed the minimum.

7. Through freight and mixed: Rate per mile, all engines, 4.15 cents; overtime, 50 cents per hour. A minimum of 100

miles will be allowed.

8. Local-freight service: Rate per mile, all engines, 4.95 cents; overtime, 50 cents per hour. A minimum of 100 miles will be allowed.

9. Work train service: Rate per day, 12 hours or less, \$4.15; overtime, 40 cents per

10. Switching service (exclusive of meal hours), 10 hours or less, \$3.50; overtime, 35

cents per hour.

11. Branch line service: Broxton branch, per day, 12 hours or less, \$3.85; overtime, 45 cents per hour. Millen branch, per day, 12 hours or less, \$4.65; overtime, 45 REQUESTS OF ENGINEERS, FIREMEN, AND HOSTLERS.

AWARD OF THE BOARD OF ARBITRATION.

12. In passenger service engineers shall be paid overtime 50 cents per hour; in through freight and mixed service, 50 cents per hour; in local freight service, 50 cents per hour; in branch service, 45 cents per hour; in work train service, 421 cents per hour; in switching service,  $37\frac{1}{2}$  cents per hour.

13. All firemen shall be paid 55 per cent of engineers' rates, including over-

14. Hostlers shall be paid 12 hours or less, \$3; overtime, 30 cents per hour.

cents per hour. Moultrie branch, per day, 12 hours or less, \$4.65; overtime, 45 cents per hour.

13. The rate for firemen we fix and award at 50 per cent of the rates awarded to the engineers.

14. Hostlers, 12 hours or less, \$3; over-

time, 25 cents per hour.

# APPLICATION OF THE AWARD.

(a) Rates of pay.—In the statements which follow a comparison is made of the rates of pay of locomotive engineers, firemen, and hostlers, as shown by the official schedules of rules and rates of pay in effect on the railroad before and after the award of the board of arbitration. In the case of locomotive engineers, as shown by the table below, increases in rates of pay were made as a result of the award, ranging from 7.7 per cent in switching to 13.3 per cent in passenger service, and from 10 per cent in local freight to 10.7 per cent in through freight, mixed, and work train service. In branch line service the rates of pay of engineers were increased by amounts ranging from 9.4 to 10 per cent of the preexisting rates. In connection with the wage increase granted in switching service, the basis of a day's work in this branch of service was reduced from 12 hours or less to 10 hours or less per day.

The table also shows the changes made in rates of pay for work performed after the expiration of the regular hours of service, the increases in overtime rates per hour ranging from 7.7 per cent in switching to 25 per cent in passenger, freight, and mixed train

service.

Amount and per cent of increase in rates of pay of locomotive engineers as a result of the award of the board of arbitration.

Class of service.	Rate.		Increase.			me, per ur.	Increase.	
Class of service.	1912	1914	Amount.	Per cent.	1912	1914	Amount.	Per cent.
Passenger, per mile Through freight and mixed, per mile. Local freight, per mile. Work train, per day. Switching, per day². Branch line: Broxton branch, per day. Mellen branch, per day Moultrie branch, per day.	\$0. 0300 . 0375 . 0450 3. 75 3. 25 3. 50 4. 25 4. 25	1 \$0.0340 .0415 .0495 4.15 3.50 3.85 4.65 4.65	\$0.004 .004 .0045 .40 .25 .35 .40	13. 3 10. 7 10. 0 10. 7 7. 7 10. 0 9. 4 9. 4	\$0. 40 .40 .40 .35 .325 .40 .40	\$0.50 .50 .50 .40 .35 .45 .45	\$0.10 .10 .10 .05 .025 .05 .05	25. 0 25. 0 25. 0 14. 3 7. 7 12. 5 12. 5

<sup>&</sup>lt;sup>1</sup> A minimum of \$4 paid engineers in passenger service when miles allowed at the prescribed rate per mile for passenger service does not exceed the minimum.

<sup>2</sup> Under the wage scale adopted as a result of the arbitration award, the basis of a day's work in switch-

ing service is fixed at 10 hours or less per day, as compared with a day of 12 hours or less before the award.

The percentages of increase in rates of pay received by locomotive firemen as a result of the award correspond to the increases received by the engineers, the rates of pay of firemen amounting to 50 per cent of engineers' rates, both before and after the award. The rates of pay of hostlers, as shown by the table following, were increased by the award from \$2.75 to \$3 per day, an increase of 25 cents per day, or 8.3 per cent, with an increase of 25 per cent in the rates of pay for overtime work.

Amount and per cent of increase in rates of pay of locomotive firemen and hostlers as a result of the award of the board of arbitration.

Class of service.	Rate.		Increase.		Overtime per hour.		Increase.	
Class of service.	1912	1914	Amount.	Per cent.	1912	1914	Amount.	Per cent.
Passenger, per mile Through freight and mixed, per mile Local freight, per mile. Work train, per day Switching, per day Branch line: Broxton branch, per day Mellen branch, per day Moultree branch, per day Hostlers, per day	\$0.015 .01875 .0225 1.875 1.625 1.75 2.125 2.125 2.75	1 \$0.017 .02075 .02475 2.075 1.75 1.925 2.325 2.325 3.00	\$0.002 .002 .00225 .20 .125 .175 .20 .20 .25	13.3 10.7 10.0 10.7 7.7 10.0 9.4 9.4 8.3	\$0.20 .20 .20 .175 .1625 .20 .20 .20 .20	\$0. 25 .25 .25 .20 .175 .225 .225 .225 .25	\$0.05 .05 .025 .0125 .025 .025 .025 .025 .025 .025	25.0 25.0 25.0 14.3 7.7 12.5 12.5 25.0

A minimum of \$2 for firemen in passenger service when miles allowed at the prescribed rate per mile for

passenger service does not exceed the minimum.

<sup>2</sup> Under the wage scale adopted as a result of the arbitration award, the basis of a day's work in switching service is fixed at 10 hours or less per day as compared with a day of 12 hours or less before the award.

(b) Working conditions.—As a result of the arbitration award engineers and firemen in unassigned service secured the incorporation in the official schedule of the stipulation noted under article 2 of the award, providing for the payment of compensation at overtime rates to such employees when held for more than 28 hours at other than designated home terminals without performing service. awarded by the board of arbitration under article 4, respecting changes in time-tables and loss of time through protecting wreck trains, also cover conditions of employment concerning which no agreement had been included in the official schedule in effect before the award.

The rule awarded by the board of arbitration under article 3, stipulating that engineers and firemen may claim 8 hours rest after they had been on duty 12 hours and completed their run, superseded the preexisting rule which provided that engineers could claim 8 hours rest after they had been on duty 10 hours and completed their run. The provisions concerning attendance at court incorporated in the official schedule as a result of the award displaced the preexisting rules which provided that road engineers and switch engineers should receive \$6 and \$5 per day, respectively, for time lost in attending court, and that firemen should be paid \$2 per day wages and \$2 per day expenses, free transportation to be furnished and the company to receive the witness fees.

# XXIII.

# RAILROADS IN WESTERN TERRITORY AND BROTHERHOOD OF LOCOMOTIVE ENGINEERS AND BROTHERHOOD OF LOCOMO-TIVE FIREMEN AND ENGINEMEN: 1914-15.

#### WESTERN ARBITRATION OF 1914-15.

During December, 1914, and the period January 1 to April 30, 1915, there was an arbitration in Chicago of a controversy as to wages and working conditions between the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen and Enginemen and the following Western railroads:

Atchison, Topeka & Santa Fe Railway, eastern lines. Atchison, Topeka & Santa Fe Railway, western lines.

Southern Kansas Railway of Texas, Pecos & Northern Texas Railway. Pecos River Railroad.

Rio Grande & El Paso Railroad. Atchison, Topeka & Santa Fe, coast lines.

Grand Canyon Railway

Atchison, Topeka & Santa Fe, Santa Fe, Prescott, and Phoenix lines. Gulf, Colorado & Santa Fe Railway.

Texas & Gulf Railway

Gulf & Interstate Railway of Texas Concho, San Saba & Llano Valley Railroad.

Baltimore & Ohio Chicago Terminal Railroad. Belt Railway of Chicago (firemen only).

Canadian Northern Railway.

Duluth, Winnipeg & Pacific Railway

Canadian Pacific Railway, lines west of Fort William.

Chicago & Alton Railroad

Chicago & Northwestern Railway.
Pierre & Fort Pierre Bridge Railway.
Pierre, Rapid City & Northwestern Railway.
Wyoming & Northwestern Railway.

Chicago & Western Indiana Railroad (firemen only).

Chicago, Burlington & Quincy Railroad. Chicago Great Western Railroad.

Chicago Junction Railway, Chicago, Milwaukee & St. Paul Railway, eastern lines. Chicago, Milwaukee & St. Paul Railway, Puget Sound lines.

Bellingham & Northern Railroad. Tacoma Eastern Railroad

Chicago, Rock Island & Pacific Railway.
Chicago, Rock Island & Gulf Railway.
Chicago, St. Paul, Minneapolis & Omaha Railway.
Colorado & Southern Railway.

Davenport, Rock Island & Northwestern Railway.

Denver & Rio Grande Railroad.

Duluth, South Shore & Atlantic Railway.

Mineral Range Railroad El Paso & Southwestern Railway.

Fort Worth Belt Railway. Fort Worth & Denver City Railway.

Wichita Valley Railway. Great Northern Railway System.

Illinois Central Railroad.
Yazoo & Mississippi Valley Railway.
International & Great Northern Railway.
Kansas City, Clinton & Springfield Railway.
Kansas City Southern Railway.

Texarkana & Fort Smith Railway.

Kansas City Terminal Railway. Louisiana & Arkansas Railway

Minneapolis, St. Paul & Saulte Ste. Marie Railway.

Missouri & North Arkansas Railroad. Missouri, Kansas & Texas Railway.

Missouri, Kansas & Texas Railway of Texas. Beaumont & Great Northern Railroad.

Texas Central Railroad. Wichita Falls Lines.

Missouri, Oklahoma & Gulf Railway. Missouri Pacific Railway and St. Louis, Iron Mountain & Southern Railway.

New Orleans, Texas & Mexico Railroad. Oregon & Northwestern Railroad.

Beaumont, Sour Lake & Western Railway.

Northern Pacific Railway Oregon Short Line Railroad.

Oregon-Washington Railroad & Navigation Co.

St. Louis & San Francisco Railroad (except hostlers).

St. Louis, Brownsville & Mexico Railway. St. Louis, San Francisco & Texas Railway. Fort Worth & Rio Grande Railway.

St. Louis Southwestern Railway

St. Louis Southwestern Railway of Texas.

San Antonio & Aransas Pass Railway

San Pedro, Los Angeles & Salt Lake Railroad. Southern Pacific Company, Pacific system. Spokane, Portland & Seattle Railway.

Oregon Trunk Railway.

Sunset Central Lines

Galveston, Harrisburg & San Antonio Railway.

Houston & Texas Central Railroad. Houston East & West Texas Railway. Houston & Shreveport Railroad.

Texas & New Orleans Railroad. Morgan's Louisiana & Texas Railroad & Steamship Co.

Louisiana Western Railroad.

Terminal Railroad Association of St. Louis. St. Louis Merchants Bridge Terminal Railway.

Texas & Pacific Railway

Dennison & Pacific Suburban Railway.

Weatherford, Mineral Wells & Northwestern Railway. Trinity & Brazos Valley Railway.

Union Pacific Railroad.

Union Railway, Memphis. Union Stock Yards of Omaha.

Wabash Railroad, lines west of Detroit and Toledo.

Western Pacific Railway.

Wiggins Ferry Co.

# HISTORY.

On October 10, 1913, the Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen and Enginemen, through their duly accredited officers, in support of the demands of the engineers, firemen, and hostlers, presented a request on behalf of all such employees of the railroads named above for an increase in wages and for sundry improvements of the rules controlling conditions of service. Meetings were held between the committee representing the employees and the conference committee of managers representing the railroads in Chicago, Ill., and negotiations were carried on and a strike vote was taken. The committee representing the employees and the conference committee of managers having thus failed to adjust the controversy, the parties at interest invoked the provisions of the act of July 15, 1913, by calling on the United States Board of Mediation and Conciliation to undertake to settle the controversy by mediation.

Commissioner William L. Chambers, Judge Martin A. Knapp, and Assistant Commissioner G. W. W. Hanger, of the United States Board of Mediation and Conciliation, conferred with the parties at Chicago for several days, but were unable to settle the controversy by mediation. On August 3, 1914, the matter was submitted to

arbitration by agreement.

The parties agreed that the matters in controversy should be submitted to an arbitration board composed of six members, two to be appointed by the brotherhoods, two by the railroads, and two neutral members. The brotherhoods named as their representatives on the board, F. A. Burgess, of Cleveland, Ohio, assistant grand chief, Brotherhood of Locomotive Engineers, and Timothy Shea, of Peoria, Ill., assistant president, Brotherhood of Locomotive Firemen and Enginemen. The railroads selected as their representatives H. E. Byram, of Chicago, Ill., vice president, Chicago, Burlington & Quincy Railroad, and W. L. Park, of Chicago, Ill., vice president, Illinois Central Railroad. The four members of the board thus chosen, not being able to agree upon the two neutral arbitrators within the time prescribed by law, so notified the board of mediation and conciliation, and on November 21, 1914, the United States Board of Mediation and Conciliation notified the four arbitrators chosen by the parties that under the provisions of the act of July 15, 1913, the board had named as the remaining arbitrators Jeter C. Pritchard, of Asheville, N. C., judge of the United States circuit court, and Charles Nagel of St. Louis, Mo., former Secretary of Commerce and Labor. The date for the beginning of the hearings was set for November 30, 1914.

The board of arbitration, appointed as above, held its first meeting, in the Federal Building, Chicago, Ill., on Monday, November 30, 1914. Judge Jeter C. Pritchard, of Asheville, N. C., was elected chairman of the board; H. S. Milstead, of Washington, D. C., was appointed secretary; William A. Britt, of Asheville, N. C., was appointed assist-

ant secretary.

Public hearings were held from November 30, 1914, to and including March 18, 1915. On March 29, 1915, briefs were submitted by both sides and arguments were had from March 29, 1915, to and including April 2, 1915. Testimony was taken from November 30, 1914 (including arguments), to and including April 2, 1915. This testimony covers 7,828 printed pages. Exhibits were presented by the employees, numbered 1 to 89, and exhibits were presented by the railroads, numbered 1 to 50, inclusive. The board was in executive session from April 3, 1915, to and including April 30, 1915, and on the last named date announced and filed its award.

#### PROPOSITIONS SUBMITTED TO ARBITRATION.

The articles finally submitted to arbitration by mutual agreement, which were in reality the requests made by the brotherhoods, were as follows:

#### ARTICLE 1.

#### PASSENGER SERVICE.

One hundred miles or less, five hours or less, will constitute a day's work in all classes of passenger service. All mileage in excess of 100 miles shall be paid for pro rata.

#### ALL OTHER SERVICE EXCEPT SWITCHING.

One hundred miles or less, 10 hours or less, will constitute a day's work in all classes of service except passenger and switching service. All mileage in excess of 100 miles shall be paid for pro rata. Ten miles run will be the equivalent of one hour's service performed, or vice versa.

#### OVERTIME IN ROAD SERVICE.

Passenger service.—Overtime in passenger service will be computed and paid for on a basis of 20 miles per hour, at rate for each class of engine used.

All other road service.—Overtime in all other service except passenger and switching service will be computed on a basis of 10 miles per hour, and paid for at the rate of 15 miles per hour, at rate for each class of engine used.

#### All overtime will be computed on the minute basis.

# ARTICLE 2.—RATES OF PAY.

#### PASSENGER SERVICE.

The rate in passenger service on locomotives other than the Mallet type weighing less than-

	Engineers.	Firemen.
80,000 pounds on drivers shall be	\$4.50	<b>\$</b> 2. 90
80,000 pounds and less than 100,000 pounds on drivers	4.60	3.00
100,000 pounds and less than 140,000 pounds on drivers	4.80	3. 15
140,000 pounds and less than 170,000 pounds on drivers	5.00	3. 25
170,000 pounds and less than 200,000 pounds on drivers	5. 15	3.40
200,000 pounds and less than 225,000 pounds on drivers	5.35	3.50
225,000 pounds and less than 250,000 pounds on drivers	5.50	3.65
250,000 pounds and over on drivers	5. 60	3. 75

In all classes of service except passenger and switching service on locomotives other than Mallet type weighing less than-

7 F	Engineers.	Firemen.
80,000 pounds on drivers shall be	\$5.00	\$3.25
80,000 pounds and less than 100,000 pounds on drivers	5. 20	3. 40
100,000 pounds and less than 140,000 pounds on drivers	5.40	3.50
140,000 pounds and less than 170,000 pounds on drivers	5.60	3. 65
170,000 pounds and less than 200,000 pounds on drivers	5.80	3.75
200,000 pounds and less than 225,000 pounds on drivers	6. 10	4.00
225,000 pounds and less than 250,000 pounds on drivers	6.40	4. 25
250,000 pounds and over on drivers	6. 70	4. 50

Mallet type engines, all classes of service, except switching service, weighing less than-

	Engineers.	Firemen.
250,000 pounds on drivers	\$7.50	\$4.90
250,000 pounds and less than 300,000 pounds on drivers	7.75	5. 10
300,000 pounds and less than 400,000 pounds on drivers	8.00	5. 25
400,000 pounds and over on drivers	8. 25	5. 50

PUSHER, HELPER, MINE RUNS, WORK, WRECK, BELT LINE, TRANSFER, AND ALL OTHER UNCLASSIFIED SERVICE.

Engineers and firemen on locomotives in pusher and helper service, mine runs, work, wreck, belt line and transfer service, and all other unclassified service, will be paid through freight rates according to the class of engine.

#### DIVISIONS WHERE GRADE IS 1.8 PER CENT,

On all divisions where grade is 1.8 per cent or over an increase of 10 per cent over valley rates will be paid.

#### NARROW GAUGE LOCOMOTIVES.

On roads where narrow gauge locomotives are in service, a 5 per cent increase over present rates in effect shall be granted.

ELECTRIC LOCOMOTIVES, ELECTRIC, EITHER MULTIPLE UNIT OR SINGLE, GASOLINE, OR OTHER SERVICE.

Where electric, multiple unit, gasoline, or other service is installed as a substitute for steam, or is now in operation on any railroad parties to this agreement or on any of the tracks operated or controlled by any of them as part of their system, the locomotive engineers and firemen shall have the right to the position of motorman and helper, respectively. The term "helper" will be understood to mean the second man employed on electric locomotives or other power.

#### SENIORITY RIGHTS-RULES, HOURS OF SERVICE AND MILEAGE.

Seniority rights to be interchangeable. Steam rules, hours of service, and mileage to apply with the following rates of pay:

	Motorman.	Helper.
PASSENGER SERVICE,		
20,000 pounds tractive power and less	\$4.50	\$3.35
Over 20,000 pounds tractive power and less than 25,000 pounds	4: 60	3.35
Over 25,000 pounds tractive power and less than 30,000 pounds	4.70	3.35
Over 30,000 pounds tractive power and less than 35,000 pounds	4. 80	3.35
Over 35,000 pounds tractive power and less than 40,000 pounds	4.90	3. 35
Over 40,000 pounds tractive power and less than 45,000 pounds		3.35
Over 45,000 pounds tractive power and less than 50,000 pounds	5. 15	3.35
Over 50,000 pounds tractive power and less than 55,000 pounds	5, 35	3.35
Over 55,000 pounds tractive power and less than 60,000 pounds	5. 50	3.35
60,000 pounds tractive power and over	5. 60	3. 35
ALL OTHER SERVICE EXCEPT PASSENGER AND SWITCHING.		
20,000 pounds tractive power and less	5.00	3. 75
Over 20,000 pounds tractive power and less than 25,000 pounds	5. 20	3. 75
Over 25,000 pounds tractive power and less than 30,000 pounds	5. 30	3.75
Over 30,000 pounds tractive power and less than 35,000 pounds	5. 40	3. 75
Over 35,000 pounds tractive power and less than 40,000 pounds	5. 60	* 3.75
Over 40,000 pounds tractive power and less than 45,000 pounds	5. 80	3.78
Over 45,000 pounds tractive power and less than 50,000 pounds	6.00	3. 75
Over 50,000 pounds tractive power and less than 55,000 pounds	6. 20	3.75
Over 55,000 pounds tractive power and less than 60,000 pounds	6.40	3, 75
Over 60,000 pounds tractive power and less than 65,000 pounds	6.60	3. 75
Over 65,000 pounds tractive power and less than 70,000 pounds	6. 80	3. 75 3. 75
70,000 pounds tractive power and over	7.00	3. 70
SWITCHING SERVICE.		
20,000 pounds tractive power and less Over 20,000 pounds tractive power and less than 40,000 pounds	4.75	3.10
Over 20,000 pounds tractive power and less than 40,000 pounds.	5.00	3.10
Over 40,000 pounds tractive power and less than 60,000 pounds	5. 50	3.10
60,000 pounds tractive power and over	6.00	3. 10

# ARTICLE 3.-LOCAL OR WAY FREIGHT SERVICE.

Local trains are way freight or mixed trains whose work is the loading or unloading of freight or doing station switching en route.

Engineers and firemen on such trains will be paid 10 per cent increase over through freight rates.

# ADDITIONAL PAY.

Through or irregular freight trains doing work such as loading or unloading freight, stock, or company material, switching at stations, spurs, mines, mills, or required to pick up or set out cars, unless cars to be picked up are first out or cars to be set out are switched together at terminals, or doing any other similar work, shall be paid for same at overtime rates in addition to time or mileage made on trip.

### ARTICLE 4.—SWITCHING SERVICE.

### Rates of pay.

	Engineers.	Firemen.
Engines weighing less than 140,000 pounds on drivers. Engines weighing 140,000 pounds and over on drivers. Mallet type engines.	\$4.75 5.00 6.00	\$3.10 3.25 4.00

Engineers and firemen required to begin service other than between the hours of a.m. and 8 a.m. will be paid 2 cents per hour, in addition to above rate.

### DAY'S WORK.

Ten hours or less will constitute a day's work in switching service. Time to be computed continuously, all over 10 hours to be computed and paid for at rate of time and one-half. All overtime to be computed on minute basis.

### MEALS.

Switch engineers and firemen will not be required to work longer than 6 consecutive hours without being allowed 30 minutes undisturbed for meals.

### ROAD ENGINES USED.

When road engines are used in yard service, road rates will apply.

### ARTICLE 5 .- PREPARATORY TIME.

Engineers and firemen in all classes of service will be allowed 30 minutes as preparatory time in addition to all other time or mileage made on the trip or day, at the pro rata rate corresponding with class of locomotive and service, provided, that on lines of railroad where rules or schedules require them to be on duty more than 30 minutes before time ordered to leave roundhouse or other point, they will be allowed 1 hour's time, and when required to be on duty more than 1 hour, actual time will be allowed. Preparatory time will be the time engineers and firemen are required to be on their locomotives prior to time ordered to leave roundhouse or other point.

### ARTICLE 6.—TERMINAL DELAY.

### PASSENGER SERVICE.

Initial terminal delay for passenger engineers and firemen shall begin at the time they are called to leave roundhouse or other point and shall end upon departure of trains from passenger depot.

Final terminal delay for engineers and firemen in passenger service shall begin at the time they arrive at passenger depot and will end when relieved from duty.

### FREIGHT SERVICE.

Initial terminal delay in freight service shall begin at the time engineers and firemen are called to leave roundhouse or other point and shall end when train has passed from yard track or lead to main line, and actually departs from the terminal.

Final terminal delay in freight service shall begin when train arrives at switch

Final terminal delay in freight service shall begin when train arrives at switch leading from main line into yard and shall end when engineer and fireman are relieved from duty, provided, that if from any cause trains are held out of yard, final terminal delay shall begin.

### MINUTE BASIS.

Engineers and firemen shall be paid on a minute basis for all terminal delays at the pro rata rate for the class of engine used, this in addition to all time or mileage made on the trip.

### ARTICLE 7.—AUTOMATIC RELEASE AND TIE-UP.

Engineers and firemen arriving at terminal or end of run are automatically released; when used again they begin a new day.

### CONTINUOUS TIME.

Engineers and firemen tied up between their terminals will be paid continuous time; no deductions will be made for time tied up.

### ARTICLE 8.—HELD AWAY FROM HOME TERMINALS.

Engineers and firemen held at other than home terminals (including rest period) will be paid continuous time for all time so held, after the expiration of 15 hours from time relieved from previous duty, at the rate per hour paid for the last service. performed; less than 1 hour not to be paid for.

### ARTICLE 9.—DEADHEADING.

Engineers and firemen deadheading on company business shall be paid the same rate and on the same basis as the engineer and fireman on the train on which deadheading. Rules in individual schedules governing minimum day and other conditions to apply.

ARTICLE 10.—HOSTLERS.

At points where an average of six or more locomotives are handled within 12 hours, day or night, hostlers shall be maintained.

### POSITIONS, HOW FILLED.

Hostling positions shall be filled from the ranks of the firemen, and they shall be paid \$3.35 per day of 10 hours or less, provided, that where hostlers are required to make main-line movements they shall be paid \$4.75 per day of 10 hours or less, overtime in each case to be computed on the minute basis and paid for at the rate of time and one-half.

When such main-line or road hostlers are paid the same rate as engineers in switching service, such position shall be filled from the ranks of the engineers.

### MEAL HOUR.

Hostlers shall be allowed 1 hour for meals between the hours of 11.30 and 1.30 day or night. Hostlers will be assigned regular meal hour between the hours named or after being on duty 5 hours. Should hostlers be required to remain on duty after designated meal hour, 1 hour will be allowed as overtime. No hostler will be required to remain on duty longer than 6 hours without having 1 full hour for meals.

### ARTICLE 11.—SURPRISE TESTS.

That the practice of conducting surprise tests by turning switch lights and placing red lights, or flags, unaccompanied by torpedoes, beside track, or wiring down automatic signals to proceed position, be eliminated.

### ARTICLE 12.—Assistance for Firemen.

On all locomotives in freight service where but one fireman is employed, and on all locomotives in passenger service, coal will be kept where it can be reached by the fireman from the deck of the locomotive. Coal of the proper size for firing purposes will be placed on all tenders.

### ARTICLE 13.-Two FIREMEN.

On coal burning locomotives weighing 185,000 pounds or more on drivers, when used in freight service, two firemen will be employed.

### ARTICLE 14.—MISCELLANEOUS.

### CLEANING OF LOCOMOTIVES.

On railroads where firemen are required to clean locomotives, they shall be relieved of such service.

### SETTING UP WEDGES, FILLING GREASE CUPS, AND CLEANING HEADLIGHTS.

When engineers and firemen are required to set up wedges, fill grease cups, or clean headlights, they shall be relieved of such service at all points where roundhouse or shop force, or an engine watchman is employed.

### PLACING OF SUPPLIES ON LOCOMOTIVES.

Where engineers and firemen are required to place on or remove tools or supplies from locomotives, fill lubricators, flange oilers, headlights, markers, or other lamps, they shall be relieved of such service at all points where roundhouse, shop force, or an engine watchman is employed.

### ARTICLE 15.—OFFICIAL RECORD OF WEIGHTS ON DRIVERS.

For the purpose of reckoning weights on drivers, each railroad, parties to this agreement, will permanently post bulletins at all terminals showing accurate service weights of all locomotives.

### ARTICLE 16.—THROWING SWITCHES AND FLAGGING.

Engineers and firemen will not be required to throw switches, flag through blocks, or fill water cars.

### ARGUMENT AND TESTIMONY OF EMPLOYEES.

The first general argument put forward by the employees was in support of a standardization of rates of pay and working conditions. The claim was made that the minimum rates of wages, rules guaranteeing the minimum compensatory benefits, and rules limiting maximum hours of employment for a day's work should be standardized or made uniform on all western railroads. The reasons submitted in behalf of this contention were:

(1) In equity railroads should not be permitted to perpetuate discriminatory rates and rules that adversely affect the earnings

and working conditions of engineers, firemen, and hostlers.

(2) The standardization of rates of wages and hours of employment for like service has been recognized as equitable and an economic

necessity in many leading industries.

(3) The "saving clause" agreed to by the committees representing the railroads and the engineers, firemen, and hostlers, which saving clause was made a part of the written agreement upon which this arbitration was based, was not prejudicial to uniformity of minimum

rates of wages and rules of employment.

(4) In the fixing of wage scales in other industries it is only the minimum rate of wages that is standardized, thus recognizing the equity of exceptional higher rates, and in fixing the basis of a day's work it is only the maximum period of time that is standardized, thus recognizing the equity of exceptional shorter periods of service for which a day's wage may be paid.

(5) The uniformity of rates and rules affecting the compensation of engineers, firemen, and hostlers should not be affected by the

relative financial resources of railroad corporations.

(6) The railroads now seek and profit by uniformity of national legislation affecting their financial management and physical operation and oppose variant State legislation affecting the same matters, and are privileged to purchase materials for construction, maintenance, and operation in a market where prices are uniform. It is, therefore, inconsistent on their part to oppose standardization of rates of pay and working conditions within the transportation industry.

(7) The institution of uniform rates and rules would make it

possible to calculate labor costs and wage requests accurately.

(8) The further claim was made that by the adoption of concerted action on the part of certain groups of railroads and their employees and the abandonment of wage negotiations on the several railroads, engineers, firemen, and hostlers had been deprived of other means of

securing uniformity of wages and working conditions.

(9) In conclusion, the argument was made that no great diversity in wages and rates existed in western territory, and standardization in accordance with the requests of engineers and firemen could be put into effect at small expense. The cost of what was termed "arbitrary rules," it was asserted, might also be avoided by standardization.

As to the request for a 5-hour day in passenger service and a 10-hour day in freight service, the declaration was made by the enginemen that these requests should be granted for the following reasons:

(1) The high speed of passenger trains and the nervous and physical strain incident thereto made the 5-hour day equitable in passenger

service.

(2) The rates of wages for engineers and firemen were less per day and per hundred miles in passenger service than in other road service.

(3) The 5-hour day for passenger service was already in effect upon a majority of the railroads in the United States and Canada, and as many of the western railroads had such rule, it should now be made the standard rule.

(4) The request for a 10-hour day in freight service was conservative, in that practically all railroads had as favorable or a more

(5) The clause in this rule provided that all mileage in excess of 100 miles should be paid for pro rata relieved railroads from paying the overtime rate where the speed of the train was equal to or exceeded 10 miles per hour, and thus established for the railroads a more favorable rule than in other industries, where the overtime rate arbitrarily began at the end of the "day."

(6) As to overtime in road service the men contended that this

rule should be awarded because:

(a) The rate for overtime in passenger service should be at least

as high as the rate for regular hours worked.

(b) The rate for overtime in freight service should be at the rate of 15 miles per hour, on a speed basis of 10 miles for the hour. rule was more elastic and less expensive to the railroads than the overtime rule was to the employers in other industries, where the overtime rate began at the expiration of 8 hours. The rule here requested relieved the railroads of paying any overtime so long as the average speed of the freight train between terminals equaled or exceeded 10 miles per hour, and in any event road overtime rates would not begin until the expiration of 10 hours.

(c) It was unquestionably shown by the evidence submitted and statements of prominent railroad officials that the heavy loading of freight trains was the direct cause of decrease in speed. freight train was overloaded the sole purpose was to increase the earnings of the railroads from that train, and this purpose was accomplished usually by exacting longer and more arduous service from the engineer and fireman.

(7) The minute basis of paying for overtime in all classes of locomotive service was equitable. Where the 30-minute basis was enforced, an injustice was done when engineers and firemen received no compensation for 29 minutes of overtime.

Where railroads were required to pay a full hour's overtime for 31 minutes, it was not fair to them. The minute basis was exact

and fair to both employer and employee.

In support of the requests as to rates of pay and the basis for wage payments, it was contended that the rates requested should be based on weights on drivers of locomotives, because:

(1) Weight on drivers was the most practical basis for standard-

ization of wages for engineers and firemen, because:

(a) It partially compensated engineers and firemen for their increased productive efficiency for the reason that as the size and power of the engine increased so did the tonnage of the trains and also the revenues to the railroads.

(b) It partially compensated engineers and firemen for increased labors and responsibilities resulting from larger engines and heavier

trains.

(c) It was the basis of wages for engineers demanded by the railroads in the eastern territory and was the basis of wages for firemen proposed by the railroads in the eastern territory, and if wages were to be standardized no basis was more equitable to the railroads and

their engineers and firemen than weight on drivers.

(2) As to the rates of pay in the requests submitted, it was claimed that they were less than would have been requested if all other compensatory features were not awarded by the board. Wages of engineers and firemen, it was stated, had never been commensurate with their labors, responsibilities, and hazard of occupation, and their wage advances in the past had not kept pace with their increased responsibilities, productive efficiency, or cost of living. Measured by the wages paid in other industries, engineers, firemen, and hostlers, it was declared, were several years behind the wage progress of other American and Canadian workingmen.

(3) Attention was directed to the claim that the higher rates of wages paid by railroads to engineers and firemen employed on the larger locomotives, as they have been introduced into the service, could not be termed "increases" in wages. The slightly higher rates conceded on the larger engines, as they had been placed in service, had not been commensurate with the increased responsibilities and labors of engineers and firemen resulting from the introduction of

such large engines.

(4) A higher rate of wages should be paid engineers and firemen on Mallet engines than on other engines, for the reason that for the same weight on drivers greater responsibility, labors, and dangers confronted engineers and firemen on Mallet engines. A Mallet engine is in fact two engines coupled together in a manner that makes it possible for railroads to operate them with one engineer and one fireman, thus saving the expense of one engine crew.

(5) The present differential of 15 cents less per day for firemen on oil burning engines should be eliminated, it was argued, and the rates requested should be awarded on all locomotives. In other industries, it was pointed out, a differential in wages per day had not been es-

tablished, and lower wages had not been paid because of the introduction of devices that reduced physical labor. Where oil had been substituted for coal as fuel, marine and stationary firemen had suffered no loss in wages per day and no differential had been established between their rates of wages. Instead of wage reductions there had been repeated wage increases in practically all industries where physical labors of workingmen had been relieved by the introduction of labor saving devices.

(6) Although a graduated wage for firemen, by weight on drivers or size of engines, where oil is used as fuel had never been insisted upon for firemen, yet it had been a well recognized principle that the ability of the employee to produce earnings for his employer was a

fair basis for the graduation of wage rates.

Through freight rates, the employees claimed, should be paid on pusher, helper, mine runs, and other unclassified service in the interest of standardization, and because a majority of railroads had already adopted this policy in some branches of unclassified service. The differential requested on mountain divisions, as compared with valley territory, should be awarded, the enginemen argued, because the mountain work was more arduous, carried greater responsibilities, and because the railroads received higher freight and passenger rates in mountainous territory. In view of the further fact that the engine crews by custom have always received higher rates of pay in narrow gauge service, the employees contended that in equity their rights should be recognized by allowing them a 5 per cent advance in wages, at least, to offset the rise in the cost of living.

As to electric locomotives, electric, either multiple unit or single, gasoline, or other service, it was claimed by the employees that the

rates asked for should be granted because:

(1) Employees should be privileged to share in the productivity and economic advantages resulting from the introduction of labor saving and profit producing machines that could be operated at a comparatively low cost. As wonderful printing inventions had brought to the employer prosperity, to the masses of the people cheaper books and newspapers, and to the employees in the printing trades better wages and improved conditions, the engineers and firemen should also share with the railroad employer and the public the profits and benefits arising out of the introduction of electric locomotives.

(2) The engineers and helpers had just as great responsibilities and must possess the same knowledge of train rules and operation as in

steam service.

(3) The railroads should not deprive their engineers and firemen of the right to employment in electric service they now possess in steam

service.

(4) Only experienced engineers and firemen should be permitted to operate trains propelled by electric locomotives. As a chain is no stronger than its weakest link, an inexperienced engineer in charge of an electric locomotive might cause disaster to himself and others, although every other engineer in the same service and on the same track might be thoroughly competent.

(5) The wage cost per ton mile to the railroads of engineers and firemen employed on electric locomotives and electric trains was much less than with steam locomotives at the same wage rate per

day.

As to higher rates of pay requested in local and way freight service, it was contended by the employees that they should be awarded because the station-switching and other work peculiar to local freight service resulted in a decrease in the average speed of such trains between terminals, thereby greatly decreasing on a mileage basis the earning opportunity of engineers and firemen for the same period of service. When local freight work was required of engineers and firemen in through freight service, additional compensation should also be paid.

As to switching service, it was claimed by the enginemen that their

requests should be allowed for the following reasons:

(1) Engineers and firemen in switching service had never possessed the numerical strength to bargain effectively for rates of wages commensurate with their responsibilities and duties. A lower rate of compensation per hour for them than for employees of similar importance in other industries was the outcome. The rates of wages per hour requested in this rule for engineers and firemen were less than wages paid by employers in many other industries for skilled workmen.

(2) If the percentage of increase in rates of wages requested for engineers and firemen in switching service exceeded the percentage in requests for other service it was because the present rates were so

low, and not because the requested rates were excessive.

(3) Rates of wages of engineers and firemen in switching service were lower, proportionately, than wages of other employees in the same service.

(4) The higher rates requested on the larger engines in switching

service were equitable because:

(a) The larger engines were maintained where the heaviest work was required of engineers and firemen. The smaller engines were usually in service at the less important switching yards or assignments. Thus, the theory of increased rates of wages for increased responsibilities and labors and increased productive efficiency was maintained for switching service.

(b) Some railroads had insisted on paying a lower rate of wages to engineers and firemen in what had been designated as "second-class" yards upon the theory that the work was not so arduous. By the gradation of rates of wages by weights on drivers, as in this rule, railroads were privileged to pay a lower rate where work was less

important by the assignment of a small engine to such work.

In support of their contention for preparatory time it was argued by the employees that this request should be granted because the preparation of a locomotive for service was an essential feature of the duties of both engineers and firemen. An engineer, it was pointed out, was required to inspect a locomotive and assume responsibility for all undiscovered defects, to attend and adjust all lubricating attachments and assume responsibility for their perfect working, to assume responsibility for the perfect working of the air brakes and other mechanical devices that make up important adjuncts to the operation of a perfect locomotive; to inspect train registers for the purpose of ascertaining the arrival and departure of trains that in any manner affect the safe operation of the train he was to pull; to inspect bulletin boards for the purpose of observing rules and orders posted for his guidance since his last trip; to compare his watch with the official timepiece of the railroad by which he was employed. After

all these duties had been performed he was ready to receive his running orders and begin the work for which railroads were willing to pay.

A fireman was required to assist the engineer in such duties as

might be assigned him.

This preparatory time, it was claimed, should be paid for in addition to all other time made on the trip or day because, this being a distinct and separate service upon which a safe and successful trip depended, it was unfair that railroads should decline to compensate engineers and firemen for it.

Terminal delay, it was the contention of the employees, should be

paid for:

(1) To prevent railroads requiring engineers and firemen to report

for duty before their services were needed.

(2) Payment for terminal delay should be in addition to all time or mileage. Unless the payment was arbitrary or independent of pay for road service there would be no incentive for railroads to abandon the practice of detaining engineers and firemen at terminals when the road trip could be or had been made at a speed that would avoid overtime.

As to the automatic release and tie-up request, it was claimed by

the employees that this rule should be granted because:

(1) So long as railroads availed themselves of the low rates of wages peculiar to the mileage basis they should not be permitted to deprive engineers and firemen of the premium or bonus feature of the mileage basis of wage payments.

(2) The automatic release and tie-up was necessary if an equitable distribution of work between engineers and firemen was to be main-

tamed

(3) In a vast majority of tie-ups of engineers and firemen between terminals in the application of the Federal hours-of-service act it was contended that the cause was the loading of the train, and this was done because the heavy loading of freight trains was the most effective method of increasing revenues of railroads and, at the same time, reducing labor cost of product, and it was therefore proper that railroads should pay engineers and firemen continuous time from terminal to terminal in this revenue-producing operation.

As to article 8, requesting pay for being held away from home terminals, the employees contended that this rule should be awarded,

because:

(1) Engineers and firemen were required to incur extra living

expenses when away from home.

(2) When engineers and firemen were held at other than home terminals their expenses not only continued, but their earning power ceased.

(3) The purpose of the railroads in holding engineers and firemen at distant terminals being to await full tonnage for trains the profits of this practice made it possible for the railroads to comply with the rule without financial loss.

(4) The burden of decreased traffic should not be borne entirely by

engineers and firemen.

The argument advanced in support of article 9, providing for payment for deadheading on company business, was that if the exigencies of a railroad's business required that engineers and firemen be sent

from one point to another for the purpose of performing certain assigned duties the burden of expense for such movements should be borne by the railroad instead of by the engineer and fireman. Already on many railroads this principle had been recognized.

In connection with the rates of pay and working conditions re-

quested for hostlers, the following arguments were advanced:

(1) Engineers and firemen while performing road service should not be required to act as hostlers. The duties of road service for engineers and firemen were extremely arduous, and railroads should not require additional service of them.

(2) Hostling positions should be filled from the ranks of the firemen, except when making main-line movements, when only expe-

rienced engineers should be employed.

(3) The advance in rates of wages requested in the proposition for hostlers should in no manner deprive them of the opportunity to eat one meal during each day's service, and this time for eating should be available at a reasonable hour.

(4) Where railroads disregard this rule they should be required to pay for one hour's work not performed, which might result in the rule

being applied.

(5) No hostler should be required to remain on duty longer than

six hours without having one full hour for meals.

(6) The rate requested, it was claimed, was equitable. The rate per hour of 33½ cents was much less than was paid in other industries for labor less skilled and work less important. No engineer should be paid less than \$4.75 for 10 hours work, and none but men qualified as engineers should be permitted to serve as road hostlers.

(7) Time-and-a-half request for overtime, it was asserted, was a penalizing request. Hostlers should not be required to work more than 10 hours per day, for it was as practical and less expensive for a railroad to relieve a hostler from work at the end of 10 hours as it was for the same railroad to relieve a shop mechanic at the end of 8 hours, which was the rule; and the only practical method of limiting a day's work was the usual method of paying time and a half for overtime.

(8) In the case of hostlers, as for all railway employees, all over-

time should be paid on the minute basis.

Existing methods of making surprise tests should be forbidden,

it was claimed, for the following reasons:

(1) The nervous shock incidental to some of the so-called efficiency tests or surprise tests experienced by engineers and firemen subjected to such tests were dangerous to the traveling public, highly injurious to the mentality of the engineers and firemen, and

an economic loss to the railroads.

(2) Men in charge of the operation of locomotives should have complete command of their mental faculties if trains were to be transported safely. Men whose judgment had been warped by exposure to unreal but threatened danger, whose sense of caution had been dulled by the cry of wolf oft repeated, were not safe men to operate trains, and if the traveling public knew the facts, it was asserted, laws would be enacted to prohibit the practices against which complaint was made.

(3) When an engineer and fireman were confronted by a seeming disaster—a misplaced switch or a collision—"they live a lifetime in

a minute," as had been aptly stated in this arbitration.

As to the request of the firemen for assistance in shoveling coal forward from the tender, it was claimed that this assistance should

be granted, because:

(1) With the growth in the size of locomotives, the greater tonnage of freight trains, and the increased weight and speed of passenger trains, tenders of greater capacity had been placed in service, with the result that much of the coal burned in a locomotive was handled

twice by the fireman.

(2) On many railroads long before the large tenders of to-day were built rules were conceded to firemen that coal would be broken to proper size for firing, and on some railroads these rules were enforced. Seldom had the fireman the time to properly break coal, and it was well known to railway officials that the expense of breaking coal to proper size for firing was saved in the more economic combustion of that fuel.

As to article 13 of the employees' requests, which provide for the employment of two firemen on locomotives weighing more than 185,000 pounds on drivers, it was contended that this rule should be

awarded because:

(1) The physical requirements for properly firing a large locomotive were beyond the capacity of one man was conceded by practically all whose personal observation had given them a knowledge

of the subject.

(2) By the increased efficiency of the locomotive when two firemen were employed the expense of the second fireman would be more than offset, as official tests had demonstrated that the cost to the railroads for firemen per ton mile was less with two firemen than with one fireman or with a mechanical stoker. At a freight rate of 1 cent per ton per mile one 40-ton car of freight added to a train where a second fireman was employed would produce additional revenue for the railroad sufficient to pay three times the entire wages of the engineer and both firemen. The greater efficiency of a locomotive fired by two firemen would, it was also claimed, probably increase the speed of the train sufficient to avoid payment of overtime to the entire engine and train crew to the extent on many trips of offsetting the wages of the second fireman.

(3) Firemen and engineers agree that to oppose the introduction of larger locomotives would be improper from an economic viewpoint. They appreciate the fact that the larger the locomotive the greater the tonnage of the train and earnings of the railroads. The assertion was therefore made that railroads should not withhold the assistance of a second fireman when by so doing the exhausted condition of the one fireman necessitated his laying off for recuperation, and thereby

losing his earnings of a day or trip.

(4) The theory advanced by the railroads that the introduction of superheating devices was a factor in the fixing of wage rates for firemen was not practical. While it was conceded that the perfectworking superheater reduces the amount of coal burned in transporting the same tonnage, in practice the tonnage was increased instead of the coal saved.

(5) In no other steam plant had the employer required one fireman to perform the work, regardless of the power generated. As the size of the steam vessel increased so does the number of the firemen and engineers employed.

(6) Upon the presumption that the substance of this rule would be awarded the board of arbitration was urged not to refer to another board of arbitration the question of when the award of this arbitration should be applied, as was done on a former occasion.

As to article 14 of the requests, providing that engineers and firemen should not be required to clean locomotives, set up wedges, fill grease cups, clean headlights, or place supplies on locomotives, it was argued:

(1) The cleaning of engines was not a fireman's work. Railroads never paid firemen for cleaning engines, and they have insisted upon their performing this work only because firemen could be coerced into

cleaning engines without compensation therefor.

(2) The setting up of wedges was a machinist's work and should be done by a machinist. Filling grease cups and cleaning headlights should be done by roundhouse employees while engineers and firemen were securing rest from their previous trip or day's work. In fact, many railroads had abandoned the practice of compelling engineers and firemen to do this work.

In support of their demand to be relieved from the duties of throwing switches and flagging, argument was submitted by the engineers

and firemen as follows:

(1) It was unfair that brakemen and switchmen should be displaced by railroads for economic reasons and then require engineers and fire-

men to perform their work.

- (2) There should be a sufficient number of brakemen and switchmen employed to throw switches and flag through blocks, for firemen were required by the rules of all railroads to assist the engineer in engine duties and to watch carefully for signals. This could not be done with the fireman off the engine performing brakemen's and switchmen's duties.
- (3) Firemen were clothed especially for the hot work of firing locomotives and usually their clothing was saturated with perspiration. To require firemen in this condition to go out in zero weather to do brakemen's and switchmen's work should be prohibited by this award.
- (4) Attention was directed in this connection to the testimony of railroads' witness (Record, p. 3318), where it was said, "The practice of not requiring engineers and firemen to throw switches or flag through blocks is established."

As to earning possibilities under existing rates and rules, a summary of the argument and testimony of the employees on this proposition

was, briefly, as follows:

The claim was made that the position taken by the railroads was based upon the earning possibilities of a few of the engineers and firemen rather than upon these classes of employees as a whole. They asserted that the railroads presented statistical statements and testimony of witnesses which demonstrated conclusively that it was possible for engineers and firemen, by working from 12 to 16 hours per day, to earn far more in a month or year than employees in other industries can earn for the same period of time when working only 8 hours per day and on only the usual working days, excluding Sundays and holidays. The employees conceded in their early testimony and documentary evidence, it was pointed out, that under the piecework and seniority systems, long in effect, a comparatively few of their fellow workmen could, by great physical effort and continuous em-

ployment, add to their earnings in a marked degree. They claimed that the real effort made by the railroads has been to show that the exceptionally high earnings at a given time are typical of the earnings of all the engineers and firemen under the existing rates of wages and compensatory rules, and in denial that the earnings of a few are typical of the earnings of all, or that the earnings for October, 1913, were typical of the earnings for all other months, the following statement was put forward:

(1) Under the piecework system, combined with the seniority system, the engineers and firemen longest in service were enabled to earn in a given month or year far more than their fellow workers

who were juniors in the service.

(2) Wages of locomotive engineers and firemen employed in road service were based upon certain rates per hundred miles traveled by the locomotive they operate. Consequently, the higher the speed of the train the greater the opportunity to add to earnings in a given time. There being no limitation to the number of hours worked in a given time, or in one trip or a series of trips, so long as the "sixteenhour law" was not violated, those with the greatest physical capacity were able to make many miles, or complete many "pieces," under this piecework system within one month's time, and the earnings of these few was one of the principal supports on which the railroads rest their case.

(3) In all piecework systems of compensating workers, after a rate per piece is established, more work per piece was exacted, and a contest continued between the worker, who seeks to increase the compensation per piece, and the employer, who exacted more and more service per piece. So it has been with engineers and firemen a constant struggle to have rates per mile keep pace with work exacted per Trains in freight service formerly were operated at comparatively high speed, under the theory of railroads then popular, that prompt service brought business. Since then managerial efficiency had proceeded upon the theory that speed was a negligible factor, and that the greater number of tons of freight that could be transported by one engineer and fireman the larger was the net revenue gain. To compensate in some degree for this loss of earning power per 100 miles, existing rules provide on 10-hour railroads that when the speed of a train fell below an average of 10 miles per hour the engineers and firemen would receive the same compensation for 6 minutes of time on duty as was paid for 1 mile traveled. Thus, engineers and firemen on such railroads received a day's pay for "100 miles or less, 10 hours or less."

(4) To support their alleged object of demonstrating that the present rates of pay and compensatory rules were full and adequate, the men claim the railroads had based their computations and estimates of expense of complying with the requests of the men upon the pay rolls of engineers and firemen for the month of October, 1913, the month in which the railroads' business was the greatest in the railroads' history. If it could be shown that a majority of engineers and firemen received comparatively large pay checks in October, 1913, the railroads presumed their contentions to have been sustained. That each of a majority of these engineers and firemen did two men's work and thereby earned two men's pay in October, 1913, many of whom earned less than half as much in other months of the same fiscal year,

was overlooked in the statements of the railroads until attention was called to these facts. The fact that in October, 1913, the business of the railroads was so great that a majority of the men were required to work a greater number of hours than in any other month in the history of railroads was no reason why the rates of wages per hour for engineers and firemen, it was contended, should be exceedingly low.

(5) Compared with the average rates of wages of employees in other industries, locomotive engineers in freight service rank below 15 leading trades. Engineers in switching service in the city of Chicago work for 42½ cents per hour, where hod carriers were paid 48 cents per hour and skilled workers in other trades were paid from 65 cents to 75 cents an hour. In a statement of average wages per hour in 17 western cities for the year 1913, for 46 trades the wages of locomotive firemen in freight service ranked thirty-eighth—lower than helpers and laborers in some industries. In the city of Chicago a locomotive fireman in switching service received 25 cents per hour, while the hod carrier in the same city was paid 48 cents per hour. Locomotive hostlers employed by one of the most important and prosperous of western railroads were required to work 12 hours per day at 25 cents per hour.

Stress was laid upon the increased cost of living by the employees as a justification for advances in existing rates of pay. The arguments put forward in this connection, briefly stated, were as follows:

(1) Approximately 10 per cent increase in wages, in the aggregate, was secured by engineers and firemen in the wage adjustments of 1910. During the four-year period ending with 1913 a special investigation demonstrated that the cost of living of engineers and firemen and hostlers had increased not much less than \$100 a year since their last wage increase in 1910. In reaching this estimate prices of articles during the winter of 1913–14 were the last investigated and no part of the period included in the present European war was considered.

(2) The purchasing power of a day's wage was of far greater economic importance to the worker in any industry than the rate of pay. Engineers and firemen had learned from years of experience that when wage increases had been conceded by railroads such advances in compensation had already been absorbed by the increases in the prices of meat, groceries, rent, cost of meals, and rooms away from home, and other items of living expenses.

In no other industry, it was pointed out further, were employees required to possess the extraordinary qualifications demanded by railroads of engineers and firemen. This was an important factor, it was claimed, that should be considered in the fixing of their wage

rates, for the following reasons:

(1) Applications of engineers and firemen for employment were extraordinary in form and detail and the examination conducted in

connection therewith was most exacting.

(2) The physical examinations of firemen upon which their employment was dependent was more rigid than that conducted by the Federal Government in the enlistment of soldiers, more extensive and particular than required of applicants for large insurance policies by insurance companies, and were carried to an extreme unknown in any other form of physical examination.

(3) The repeated visual and aural tests to which engineers and firemen were subjected, while maintaining the highest degree of

physical efficiency, constantly endangered their employment.

(4) Repeated mechanical investigations of the technical knowledge acquired by firemen and the high standard of technical qualifications required by firemen made highly skilled men of them, often years before their promotion to the position of engineer.

(5) Engineers before promotion and while yet serving as firemen were required by thorough and exhaustive examinations and tests to demonstrate their technical qualifications to serve as engineers.

(6) Engineers and firemen who had successfully survived these ordeals were in constant danger of being debarred from employment by any railroad because of injuries or other ailments, many of which were truly occupational.

As to the occupational hazard of locomotive engineers and firemen, a summary of the testimony and argument of the employees on this

point briefly was as follows:

(1) Almost one-half of all deaths of members of the Brotherhood of Locomotive Firemen and Enginemen were the direct result of railway accidents. Of 1,224 members who became physically disabled during the 10 years ending December 31, 1913, 544 of such disabilities were amputations of hands or feet. In no other occupation would the hazard of employment be shown so great.

(2) Scientific investigations had reported the occupational hazard of the locomotive engineer to be far greater than in many other

industries.

(3) Insurance of engineers and firemen by many old-line companies and fraternal societies was prohibited, and where not prohibited the

rates were usually far in advance of normal rates.

The underlying fundamental argument for better wages and working conditions advanced by the employees was based on the increased work and productive efficiency of locomotive engineers and firemen. A summary of the testimony and argument of the employees on this

point follows:

(1) It was claimed that there had been a marked increase in their labors and responsibilities. The fireman has had more arduous physical work to perform because of the necessity on coal burning railroads of handling more fuel for each locomotive mile traveled. Measured by this standard, the sworn annual statements of western railroads to the Interstate Commerce Commission showed that the work of firemen on coal burning locomotives increased from 52 to 162 per cent, according to railroads, during the period from 1890 to 1913 and from 34 to 118 per cent during the period 1900 to 1913. The engineer, on the other hand, had found it necessary to operate a larger and more complicated mechanism and has had his duties increased by the responsibility of looking after a much heavier train.

(2) The productive efficiency of engineers and firemen, or, in other words, the volume of traffic handled per engineer and fireman, had been greatly increased. This was apparent from the number of ton miles or traffic units transported by engine crews at the present time as compared with former years. Measured on the basis of each \$1,000 compensation paid engineers and firemen, the freight engineers on 24 representative western railroads, considered as one system, in 1913 handled 92 per cent more ton miles than in 1890, and the freight firemen for each \$1,000 paid them transported 83 per cent more freight traffic in 1913 than in the year 1890. Considering both freight and passenger traffic together, the engineers and firemen employed by

these representative western railroads on a very conservative basis of calculation for each \$1,000 paid in wages hauled a volume of combined freight and passenger traffic from 40 to 50 per cent greater in 1913 than

in 1890.

(3) This increased productivity, it was contended, had been attended by a decrease in costs to the railroads in terms of wage payments to engineers and firemen for each unit of traffic handled, or, in other words, it had cost the railroads less in outlay to engineers and firemen to transport ton miles and passenger miles. During the period 1890 to 1913 the ratio of the cost of engineers and firemen to total operating expenses for 24 representative western railroads, considered as one system, declined from 9.89 to 8.06, while the proportion of operating revenues absorbed by wage payments to locomotive engineers and firemen fell from 3.94 per cent in 1890 to 3.30 per cent in 1913. During this same period the outlay in terms of wages to engineers and firemen for each 1,000 ton miles handled was 33.1 cents less on these same roads in 1913 than in 1890.

(4) As the introduction of engines of greater tractive power which were able to haul a larger amount of traffic than those which they superseded had increased, the field of employment of engineers and firemen had been curtailed and the opportunities for promotion had

been restricted.

(5) In their annual reports to stockholders during recent years railroad executives had commented in detail upon the development of greater freight train loads, the handling of a larger volume of traffic with fewer locomotive and train miles, and the decrease in labor and general operating expenses which had been thus secured. Their statements, it was asserted, fully corroborated the claims of the locomotive engineers and firemen, as set forth in the arbitration proceedings.

(6) It was clear, also, it was claimed, that the development in the productive efficiency of locomotive engineers and firemen employed on western railroads had not reached its maximum. A series of interviews with railroad presidents, which were published in the Railway Age Gazette in its issue of April 10, 1914, was used to corroborate this contention. With one exception, they all stated that they believed there would be greater increases in the weight of freight train loads. The realization of this prospect, it was pointed out, would obviously mean more work and responsibilities for engineers and firemen and

further increases in their productivity.

(7) An analysis of the operating and financial performance of 43 representative western railroads, considered as one system, during the period 1909 to 1913, showed that after the payment of all increases in costs of operation, and after allowing interest at 4 per cent per annum for expenditures for additional capital investment during the same period, there was a balance remaining to compensate the increased productive efficiency of locomotive engineers and firemen and other labor of \$50,541,129. If 5 per cent be allowed to added capital investment during this period, including the additions made from income, it was claimed by the employees that there would still remain \$34,629,574 available for the compensation of increased productive efficiency on the part of locomotive engineers and firemen These gains, it was asserted, were now contained in and other labor. the accumulated surplus and other assets of the railroads, and locomotive engineers and firemen were entitled to a further participation

in these gains because of their increased work, duties, and responsibilities.

(8) Enginemen, it was argued further, had no control of operating or managerial efficiency and should not be expected to bear the burden of operating inefficiency or financial mismanagement. The determination as to the degree of participation in revenues to be accorded them should, it was asserted, be based on locomotive or trainmile costs and revenue gains. On this basis, locomotive engineers and firemen had an opportunity to demonstrate their increased work and productivity. By this standard it was at once evident from the testimony submitted, it was declared, that the labors and responsibilities of enginemen had increased, that their productivity, in terms of units of transportation, had rapidly advanced, and that their cost to the railroads in terms of units of transportation had declined, leaving large revenue gains available for increased compensation.

As the next step in their argument the employees undertook to prove the financial ability of western railroads to pay increased wages to their locomotive engineers, firemen, and hostlers. A summary of the testimony and argument on this point is set forth below:

(1) In the first place, it was shown that the combined accumulated surplus of 43 leading western railroads, which were parties to the arbitration proceedings, amounted, on June 30, 1914, to \$625,895,415.

(2) The actual cash on hand or in bank reported by western railroads engaged in the arbitration proceedings amounted, on June 30,

1914, to \$208,278,196.

(3) Thirteen independent railroads practically owned or controlled the other western railroads. These 13 proprietary companies on June 30, 1914, had an accumulated surplus of \$440,812,500, and cash on hand amounting to \$109,101,107.

(4) Larger dividends were disbursed by western railroads in 1914 than in 1913 or 1910. There were no dividend or interest curtailments by western railroads in 1914 the finances of which had been

properly and conservatively managed in the past.

(5) A number of railroads in the West in 1914, showed a deficit in current income after the payment of operating expenses and capital charges. Eliminating those railroads which have been weakened by financial mismanagement and those which were subsidiaries of prosperous systems, it was shown that less than 1 per cent of the total mileage of western railroads engaged in the arbitration proceedings were operated in 1914 at a deficit, after the payment of fixed charges.

(6) Fifty-three western railroads during the fiscal year 1913, the last year of which time was available to make the computation, earned 7.78 per cent on their total capital stock outstanding, whether it had been issued with or without consideration in property or earning values; 10 of the leading companies of the West, during the same year, earned 9.66 per cent on their total outstanding capital

stock.

(7) Hidden assets of immense value, it was claimed, were in the possession of certain western railroads but did not appear on their books at their real value, such as the timber, oil and mineral lands of the Southern Pacific Co., which were estimated to have a market value of \$700,000,000, and which were reported with a book value of only slightly more than \$40,000,000; also the timber holdings of the Northern Pacific and Santa Fe Railroads, which were worth

between \$50,000,000 and \$100,000,000, but which were not reported

among the assets of these companies.

(8) So far as any western railroads find themselves in a weakened financial condition now as compared with past years, it was asserted that this condition could almost invariably be traced to the inevitable result of past mismanagement of their finances. No western railroad, that had been properly managed and operated, or that had been projected with true economic judgment and foresight, was insolvent during the past fiscal year.

In conclusion, the employees contended that the depression in business and industry which had followed the outbreak of the European war would soon disappear and that the outlook for the future was very encouraging. The data advanced in support of this

point were as follows:

(1) There had been a favorable change in the attitude of the Federal Government, State regulatory authorities, and of the public toward the question of increased freight and passenger rates as well as toward the entire railroad situation.

(2) There had been a marked recovery from the crisis precipitated by the breaking out of the European war, as evidenced by the great expansion of the country's foreign trade which, in a large measure,

was the underlying basis of prosperity.

(3) A rapid improvement in business conditions in the United States in 1915 was predicted by men in close touch with the financial and industrial life of the country.

(4) Statements put out by railroad officials, summarizing the results of operations since the close of the fiscal year 1914, indicated that western railroads were already feeling the effects of returning

prosperity.

- (5) A resumption of industrial activity and the restoration of prosperity was indicated, it was claimed, by the expansion in the lumber industry in the Southwest and in the Pacific Coast States; in the increased output of copper mines in Michigan, Arizona, and Montana; in the resumption of cotton exports on a large scale; and in the primary movement of grain to Chicago and other centers of
- (6) There had been a rapid and steady improvement in the investment market.
- (7) The monthly reports of the western railroads as to earnings and traffic clearly indicated, it was asserted, a constant upward movement toward normal conditions. A few railroads showed higher revenues now than for the corresponding period last year; the others ranged from 3 to 10 per cent below normal as compared with the year before. Practically all indicated, however, a steady progress during the recent months in recovering from the depressed conditions of the late summer and autumn.

### ARGUMENT AND TESTIMONY OF THE RAILROADS.

On the part of the railroads the issues made and the arguments

presented are set forth briefly in the following paragraphs.

The first point considered by the railroads was the general issues presented in the case. They contended that substantially all the proposals offered by the engineers and firemen were designed to bring about greater compensation, not merely through requested increases in the rates of pay, but through arbitrary payments in addition to the miles of the trip or the hours on duty, as well as through changing the basis of computing so-called overtime; the demands, it was claimed, were coordinated in such a manner as to make cumulative the additions to compensation. The railroad companies conceded that the wage scale of engineers and firemen has been fixed by considerations which were peculiar to and inherent in the nature of their occupation, and that their line of work involved not only labor, but also care and responsibility, so that if and when the progress of the art of railroading brought about changes whereby there was imposed upon the engineers and firemen added labor or added responsibility any tangible increase in such burden should be reasonably reflected in their compensation.

They stated that the employees having declined to submit to arbitration the question of eliminating from the schedule any rate or rule, no matter how inequitable or arbitrary, and having insisted that the starting point of the questions arbitrated must be the existing schedules on the several roads, it would seem apparent that the preliminary question to be answered by the arbitrators before any consideration of the detailed propositions could be given must be: What changes, if any, had been made in the labor or responsibilities of the engineers and firemen since the last concerted wage movement, concluded as to the firemen on June 4, 1910, and as to the engineers on December 24, 1910. This the railroads claim clearly stated the

issues involved.

As to the argument of increased work and productive efficiency, the railroads made denial of the claims set forth by the engineers and firemen and stated that the position of the employees as to this increase was not borne out or sustained even by their own witnesses. They declared that while an interesting problem in economics might conceivably be presented in a case wherein there was an increased productivity within a certain period, brought about through the combined contributions of labor, capital, and managerial efficiency, and the proper allocation of their respective shares to capital, to managerial efficiency, and to the several classes of labor contributing to the general result was the issue in the present case, a discussion of any such problem seemed unnecessary in view of the fact that if the theory advanced by one of the employees' witnesses was sound and his formulas were left unquestioned that he had demonstrated himself that during the period since the last wage adjustments the combined efforts of capital, labor, and managerial efficiency had not brought about any increase in so-called "productive efficiency." Denial was also made concerning the unit of productivity of engineers and firemen, and the statement was advanced by the railroads that engineers and firemen had nothing to do with revenue. They were employed to run engines and produce engine miles, which were units of expense to the company and units of compensation to the engineers and firemen. Employees do not produce revenue miles or ton-miles, and as to the question whether their engines hauled a large or a small number of tions, or produced a large or a small amount of revenue, enginemen had no control and no opportunity to affect results. The number of tons of freight per loaded car, or the number of cars or tons per train, could, it was asserted, in no manner be affected by any duties performed by the engineers or firemen. The railroads provided the equipment; traffic officials endeavored to provide traffic; operating officials brought about better car and train loading; and constant effort was made to reduce empty-car movement. All of these efforts aimed to bring about greater efficiency and economy, and to these endeavors the engineers and firemen could make no contribution. Their duties and responsibilities had no relation to whether cars were loaded or empty, whether revenue or nonrevenue; and obviously they could make no contribution to efficient car loading or train loading or to the revenue produced thereby. The railroads distinctly disclaimed that any logical reasoning could justify the measurement of "productive efficiency" of engineers and firemen either in terms of ton miles or revenue train miles. Nevertheless they asserted that it was clearly established by official information that in the period from 1909 to 1913 there had been no substantial gain in "productive efficiency," even when arbitrarily measured in terms of "ton miles" and no gain whatever if measured in terms of "revenue train miles."

The railroads next entered a denial to the argument that the labors or responsibilities of engineers and firemen had increased since 1910.

Treating "labor" and "responsibility" as two separate items, it was pointed out that the only claim of increased labor since 1910 had been made on behalf of the firemen. It was not claimed by any witness, according to the railroads, that the physical labor of engineers had been in any manner increased. As to the firemen, the reply of the railroads was that, generally speaking, it was true that larger engines burn more coal; but likewise generally speaking, while it was also true that such larger engines take higher rates of pay, it is also true that the differences in rates of pay between the larger and smaller engines was greater than the difference in the work on such engines, and therefore the firemen working on such larger engines received more pay per ton of coal handled than does the man on the smaller engine, and by virtue of the rates of pay being based on the size of engines the practical effect upon a fireman who transferred from a small to a large engine was not merely to increase absolutely his rate of pay, but also to make such rate higher per ton of coal shoveled. The employees, it was pointed out, had produced elaborate statistics to show that there had been an increase in the fuel consumed per locomotive-mile. They also introduced statistics showing aggregate payments to firemen during similar periods. But inasmuch as larger locomotives generally take higher rates of pay than do the smaller ones, the railroads contended that the real question was: Does the installation of the larger power on these railroads cause firemen to shovel more coal for the same money, or does the installation of such heavier power in fact reduce the amount of physical labor necessary to be exerted to earn a dollar?

Taking the period of comparison used by the employees concerned in this case, 1909 to 1913, it was found by the railroads that the average coal consumed per locomotive mile increased from 150.09 pounds in 1909 to 163.91 pounds in 1913. The average compensation to firemen per locomotive mile on these roads was 3.195 cents in 1909 and 3.698 cents in 1913. In other words, while the fuel consumed per locomotive mile showed an increase, the statistics compiled on the part of the employees showed also a more than proportionate increase in compensation per locomotive mile, so that for each mile run by

firemen, the amount of coal handled by them for each dollar of com-

pensation actually decreased 5.7 per cent.

As to increased responsibilities, the answer of the railroads was that as in the case of the showing that larger engines burn more coal the weakness in probative value of the facts adduced was that no consideration was given to the fact that these larger engines were given a higher rate of pay, and no information, data, or statistics were presented from which the board of arbitration could form any conclusion on the question whether these higher rates measured up to or even beyond the added responsibilities which were assumed by the

engineer and fireman in handling the larger engines.

From the data presented by the employees as to coal consumption, it was fairly demonstrable, the railroads contended, that on the larger engines the firemen shoveled less coal per dollar of compensation than on the smaller engines; but, it being admitted that an engineer and fireman who made a run on a light engine one day would, under present schedules, receive a higher rate of pay if they returned over the same division on a larger engine, the record was left without any proof whatever as to whether this higher rate on the return trip measured up to or even beyond any added responsibility which arose from the use of the heavier engine. Did proof that there are now in use more large engines than in 1910 prove anything, the railroads questioned, except that more engineers and firemen were now getting the higher rates established for the larger engines? Granting, for the sake of argument, everything that had been suggested by the employees as to the added duties and responsibilities on the large engine, from what fact in evidence, or suggestion in argument, could this board of arbitration say whether the change from a \$4.95 rate to a \$5.45 rate, made contemporaneously with the change in duties and responsibilities, adequately compensated for the change in duties?

As to the claim advanced by the employees, that the earning capacity of engineers and firemen, even at the higher rates agreed upon in 1910, had declined, the position taken by the railroads was that the only way in which this proposition could be established would be by proving that engineers and firemen were unable to make

as many miles as they did formerly.

To meet the question squarely whether, in 1913, the railroads involved, treated as one operating system, kept the engineers and firemen longer on the road than in 1910, it was pointed out that railroads' Exhibit 10 was compiled, which made comparison between

the operations of October, 1910, and October, 1913.

This Exhibit 10 showed that in October, 1910, on the basis of number of trains operated, 76.26 per cent accomplished their run at a speed greater than 10 miles per hour, while in October, 1913, this percentage had increased to 77.09; on the basis of train mileage, in 1910, 76.40 per cent accomplished their run at a speed greater than 10 miles per hour, while in October, 1913, this percentage had increased to 77.76. In other words, facts and figures, it was claimed, proved precisely the reverse of the argument advanced by the employees as one of the reasons for the proposed increase in rates.

As to increased cost of living, the railroads asserted that it was very questionable whether in a concerted movement which asked an award applicable alike to the apprentice and to the engineer on an assigned run which pays over \$3,000 a year, the cost of living could

be made relevant or applicable to the issues. There was no issue here of a living wage. What persuasive value was the cost of food in determining whether there should be a change in the wage scales of the numerous engineers shown in railroads' Exhibit 41 as earning above \$2,200 per year and as high as \$3,725.20, or of the large number of firemen shown in railroad's Exhibit 42 as earning more than \$1,300 per year and as high as \$2,061.63? Take the case of the fireman who formerly fired an engine which took a \$3.10 rate, and who then fired a larger engine which took a \$3.75 rate. His earnings had increased more than the cost of living and the cost of living argument had relevancy only on the question of earnings. If any consideration could be given in this movement to the question of increased cost of living, it would seem that if, on the one hand, there was to be considered the increased cost applicable to the class as a whole, there must be considered as against this the increased earnings applicable to the class as a whole. Railroads' Exhibit 20 showed, it was claimed, that the installation of the heavier power, and therefore, the making more generally applicable the higher rates of pay, had been progressive throughout the period since the last award, and, as demonstrated by railroads' Exhibit 10, the installation of the larger engines meant the installation of a higher rate of pay earned on an average in the territory as a whole in just as few a number of hours.

Objections to article 1 proposed by the employees as to the basis of a day's work and overtime in road service were made as follows:

Paragraphs 1 and 3 of this article created, it was pointed out, an absolute 5-hour day in passenger service, and provided for payment of overtime on a speed basis actually in excess of the scheduled speed of several hundred passenger trains in western territory. Railroads' Exhibit 1, page 5, showed that the rule generally in effect in western territory provides that 100 miles or less, 10 hours or less, constituted a day's work in all classes of passenger service, and that mileage in excess of 100 miles, or hours in excess of 10, were paid for pro rata; 46.33 per cent of the mileage represented provided for a day of 10 hours or less, 100 miles or less; and 42.69 per cent, or the mileage represented, simply provided 100 miles or less constituted a day's work. Pages 48 and 49 of railroads' Exhibit 1 showed that 68.3 per cent of the mileage in western territory paid overtime at the rate of 10 miles per hour; that 12.7 per cent allowed a flat rate per hour for overtime; and that 97 per cent allowed less than 20 miles per hour as overtime in passenger service. There seemed to be no schedule that had a rule identical with the one proposed. Attention was called to the award in the eastern engineers' case which fixed the minimum passenger rate for engineers at \$4.25 for 100 miles or less, miles made in excess of 100 pro rata and for overtime in through passenger service to be computed on the basis of 20 miles per hour, and also to the fact that neither in the award nor in the interpretation afterwards made of it is there any "5-hour day." Also to the award in the eastern firemen's case which provided for a 5-hour day in passenger service other than turn around and suburban service, and which established a flat rate of 30 cents per hour for overtime in all passenger service. It should also be borne in mind, the railroads stated, that there existed on the 139,411 miles of railroad represented in this movement far greater diversity of operating conditions than is found on the 66,876 miles involved in the eastern engineers' arbitration,

wherein the award above cited fixed a speed basis of 20 miles per hour and gave only a spread of 12 hours in turn-around service. The speed depends of course upon the topography of the country as well as upon the character of roadbed and equipment, and from exhibits introduced both by the railroads and by the employees it is shown that the rule adopted in eastern territory would require several hundred passenger trains in the vast western territory to be on overtime basis, although encountering no delays en route and making the time at which scheduled between terminals. So, also, in this great western territory a rule of universal application to short turn-around runs must necessarily be more elastic than in the smaller eastern territory where turn-around runs can be arranged to meet conditions which do not obtain in western territory. Table 3 of railroads' Exhibit 16 showed that the population per mile of line in eastern territory is 662.1, as against 243.2 in western territory. Railroads' Exhibit 3, sheet 2, showed further that if paragraphs 1 and 3 had been in effect during the month in which this proposal was made, such provisions would have required additional payment to the engineers and firemen for a single month in the sum of \$75,298.85, or over \$800,000 per year.

Paragraph 4 seeks to establish in lieu of the principle of paying prorata for hours over 10, the principle of premium or punitive payments, which had always been considered both impracticable and inequitable in transportation service. Attention was called to the arbitration under the Newlands Act between the eastern railroads and the Order of Railway Conductors and the Brotherhood of Railroad Trainmen, wherein a proposal similar to the one here made was denied. Attention was also invited to the testimony of Messrs. Keefe, Higgins, and Trenholm, wherein they testified to the impracticability as well as the inequity of the proposed punitive rule, and gave as their judgment as practical operating men that the tendency of any such rule would be demoralizing, because of furnishing conflicting incentives to operating officials and to men upon the road, whereas under present conditions they had the same incentive—to accomplish the run as speedily as

possible.

As to the requests for increased rates of pay, the railroads stated that the great majority of schedules in western territory classified engines on the basis of size of cylinders. By the award in the firemen's case of June 4, 1910, a uniform rate was fixed for "simple engines having a cylinder 24 inches or over in diameter and on compound engines weighing 215,000 pounds or more on drivers"; and by the agreement with the engineers, dated December 24, 1910, a uniform increase was provided for "engineers in through freight or passenger service on engines (other than Mallet type) weighing 215,000 pounds and over on drivers." In western territory, therefore, the only uniform "weight on driver" basis in schedules of both engineers and firemen pertained to engines weighing more than 215,000 pounds on drivers. Below that weight classifications were both on a cylinder and weight on driver basis, depending upon the manner in which individual schedules had been built up.

It had been established by the testimony, it was claimed, that there was a fairly well-fixed ratio between tractive effort and size of cylinders, and inasmuch as size of cylinder was one of the important factors in determining what a locomotive would do, the size of cylinder was a more satisfactory basis than weight on drivers, inasmuch as there was never any difficulty in ascertaining exactly the diameter of

the cylinder.

The railroads objected to the paragraph relating to pusher, helper, and mine runs, on the ground that it sought to throw into a single group different classes of service which varied to fit conditions peculiar to individual roads. Rates appearing in the various schedules had been adjusted, it was stated, to measure up to the varying service performed under diverse conditions in different localities, and no reason was offered by any witness on behalf of the employees in support of the claim that all other unclassified service should be computed on the through freight rates.

Concerning the proposal for higher rates of pay on divisions where the grade was 1.8 per cent, the railroads stated that the evident intent and purpose of the proposal furnished ample reason why it should be refused; and, aside from the absurdity of this pyramiding one differential upon another, the testimony developed that in Illinois and Missouri as well as at numerous places in supposedly prairie territory there were grades of more than 1.8 per cent. Also that it was proven by the testimony that all freight trains coming from western territory going east to St. Paul passed over a grade of 1.8 per cent or greater.

Concerning the proposal for increase in rates on locomotives in narrow gauge service, the railroads stated that the only narrow gauge service described by any witness on behalf of the employees was that on the Denver & Rio Grande between Salida and Gunnison and Salida and Alamosa. Testimony showed that the tonnage in this service had increased from 35 to 60 tons in the last year, although the size of the power had been the same since 1903, and the witness giving this testimony stated that rates of pay on narrow gauge engines were increased from \$2.78 to \$3.05 in freight and \$2.71 to \$2.95 in

passenger service on April 1, 1912.

As to the proposal regarding electric locomotives, electric either multiple unit or single, gasoline or other service, the railroads asserted that the only electric service in western territory described by any witness on behalf of the employees was that in the Great Northern tunnel at Tye. In this service an employee witness testified that he earned about \$1,900 a year as motorman, although his earnings had been as high as \$220 per month. There was not a syllable of evidence in the record, it was claimed, which had any tendency to show that rates now paid in the electric service, as it exists, were not full, fair, and adequate, and the real purpose of the proposal was to have established for all time in a service which was still in an experimental stage the proposition that "steam rules, hours of service, and mileage will apply."

The position of the railroads was that it was only proper and right for a road that has engineers and firemen, when they changed to some other motive power than steam, to give its engineers and firemen the opportunity to handle the new style of power, but that in as much as the duties are not as hazardous or exacting and the responsibilities could be no greater, the question of rules and rates suitable to the service should be left open so as to make such rules and rates fit the changed character of service which came about with the change in

motive power.

As to the proposal of the employees relative to local and way freight service, the railroads stated their position had always been

that local or way freight trains differed so widely in make-up and character of service that it was impracticable to make a definition applicable to all localities in a territory so vast as the one involved

in the arbitration proceedings.

As to the proposal for mixed trains, the railroads contended that this article proposed to give to mixed trains a rate 10 per cent higher than through freight trains. Railroads' Exhibit 1 (p. 116) showed, it was stated, that to cover this mixed train service schedules of the various roads contained provisions applicable to the peculiar service on different lines or even on different parts of the same line. These varying provisions were manifestly adapted to meet the varying character of the service performed on the different railroads and on different branches of the same system, and it was worthy of note that no witness was introduced on behalf of the employees to testify that in any kind of mixed service the rates of pay provided in existing schedules was not adequate or to offer any suggestion why any such mixed service should be put upon a uniform basis whereby it would bear a fixed percentage relationship to the rates in through freight service.

As to the proposal for 10 per cent differential the railroads stated that the second paragraph of article 3 sought to change the differential established for both engineers and firemen in 1910; and this notwithstanding the fact that the differential existing in western territory was the same as the differential established in the eastern engineers' award and higher than the differential established in the western firemen's award made April 23, 1913.

The objections made by the railroads to the proposal for rates of

pay in switching service were as follows:

(1) Railroads' Exhibit 1 (p. 188) showed that practically all the roads in western territory were paying a minimum rate of \$4.25 in first-class yards, and that the rate thus paid was higher than in the East, where a minimum rate of \$4.10 was awarded.

(2) The award of April 23, 1913, in the eastern firemen's case fixed a rate of \$2.50 on locomotives weighing less than 140,000 pounds on drivers and \$2.60 on engines weighing 140,000 pounds or more on

drivers.

Concerning the request for a time and a half for overtime in yard service the railroads called attention to the fact that the board of arbitration in the eastern trainmen's case specifically passed upon yard service, and asked that this decision be applied in this case. Attention was also called to the fact that on the New York, New Haven & Hartford that the daily rate in 8-hour yards was \$3.50 for engineers and \$2 for firemen, while the same road pays in 10-hour yards to engineers \$4.10 and to firemen \$2.50.

Concerning the proposal that when road engines were used in yard service road rates should apply, the railroads claimed that no practical reason had been advanced why a road engine used in switching service should receive higher rates of pay than any other engine

used in the same service.

As to the requests for preparatory time and for terminal delay, the railroads treated these as interrelated subjects. Requests for preparatory time, it was stated, as well as initial and final terminal delay were contained in the propositions submitted to the board which decided the eastern engineers' controversy on November 2,

1912, and were also contained in the propositions decided by the arbitration board in the eastern firemen's case on April 23, 1913, and the award of the board in the engineers' case negatived this proposition when they decided that "In all classes of road service an engineer's time will commence at the time he is required to report for duty and will conclude at the time the engine is placed on the designated track or relieved by hostler at terminal," and on the question of initial terminal delay that board held "Compensation for initial terminal delay is not allowed beyond that involved in the rule that pay shall begin in all cases at the time an engineer is required to report for duty," and on "final terminal delay" the board held "For freight service final terminal delay shall be computed from the time the engine reaches designated main track switch connection with the vard track. For passenger service, final terminal delay shall be computed from time train reaches terminal station." The board held further "Final terminal delay after the lapse of 1 hour will be paid for at the end of the trip at the overtime rate according to class of engine on the minute basis." The decision in the firemen's case referred to was along the same lines as that quoted in the engineers' case.

Objections by the railroads to the proposal for "automatic release and tie-up" were made on the ground that the principle of engineers and firemen being released each time they arrived at terminal or end of run, regardless of miles run or service performed, was susceptible of requiring payments of two, three, or more 100-mile allowances for a continuous service, even though such service might be less than 100 miles in the aggregate. The application of this proposal to runs regularly fixed under present schedules would lead, it was claimed, to such absurd conclusions that the employees could not seriously

insist in argument upon any such rule.

As to the proposal under article 7 for continuous time, the railroads' objections to this were that tie-ups between terminals were rare and exceptional in present railroad operation. Ordinarily they were due to occurrences which the company can not foresee and provide against, and in all cases serve to interrupt the traffic and to make the equipment idle and unproductive. While certain employees testified to occasional long hours on the road, yet when the whole picture is presented, employees' Exhibit 41 showed that the cases of continuous service in excess of 16 hours brings an average of but one such occurrence per man over an 18-month period, and railroads' Exhibit 12 showed that in the year ending December 31, 1913, only six-tenths of 1 per cent of the trains run were tied up between terminals on account of the 16-hour law. It was therefore not deemed necessary that such proposal should be awarded by the board.

Objections made on the part of the railroads to the proposal in

article 8, "held away from home terminals," were:

(1) The testimony of the employees themselves did not warrant

the granting of this request.

(2) That the only cases in which any legitimate ground for complaint could arise concerning length of time away from home terminal was in pool or unassigned freight service.

Inasmuch as the only rule established on this subject in western territory in an arbitration proceeding provided for payment at the end of the first 30 hours and for each 24 hours thereafter, and inasmuch as the rule thus awarded by arbitration was in effect as to its trainmen on one of the roads parties to this proceeding, it was claimed that in no event should a rule on this subject be considered by the board which laid down for the whole territory a rule any more rigid and elastic than the one awarded in the recent Burlington arbitration

As to the proposal contained in article 9 for deadheading, the railroads stated that practically every railroad involved in this proceeding now specifically covered the matter of deadhead service and deadhead pay by schedule provision, and this substantially was all that was proved on behalf of the employees in this proceeding. The only employees' witnesses who testified on the subject of deadheading simply pointed out the provisions of various schedules and said nothing as to any changes in labors, responsibility, or nature or character of this service as compared with the time when present schedules were agreed upon. Because of the proposal being inherently unreasonable, and because no testimony had been offered to show either changed conditions or any inadequacy of compensation under existing rules, the railroads claimed that the board should give it no consideration.

Objection to article 10, relating to hostlers, was made by the railroads because it sought to take from operating officials all discretion as to the points at which hostlers should be maintained, and to fix a rigid rule which made no allowance for peculiarities of particular roads. Paragraphs 2 and 3 sought to take from operating officials all right to make selection of the employees from whose ranks hostlers might be recruited, and gave to enginemen general jurisdiction over hostlers as a class. The conditions under which hostlers were employed and the service they were required to perform were not the same at all points in the territory or at all points on the same line. The duties, labors, and responsibilities varied at different points, and this subject should be treated, as it always had been in the past, as one which was wholly regulated and to be determined by each line according to its particular requirements.

As to rates of pay, hours, overtime, and meals for hostlers, the railroads stated it was pertinent to point out that the ultimate result of the adoption of the employees' proposal would be, after having stated where hostlers were to be maintained and from what preferred class of employees they were to be taken, to change the basis of pay on a number of roads from a monthly basis of 12 hours per day to a basis of a per diem wage, with a minimum of 10 hours and overtime

thereafter at the rate of time and one-half.

In the eastern firemen's case the board, it was pointed out, was not asked to lay down any rule as to points at which hostlers should be maintained or to prescribe specifically that hostlers' positions should be filled from the ranks of firemen. The board was not asked to fix a meal-hour limitation for hostlers, and but 6.5 per cent of the mileage had meal-hour provision for this class in their schedules. They were, however, asked to accept a definition proposed by the firemen's organization for the term "hostlers," but no such definition was made, and the award simply fixed the rates of pay.

As to the proposal made in article 11 for "surprise tests" being abolished, the railroads stated that, in view of all the talk concerning endangering of life and limb by surprise tests, it was rather startling,

upon analysis of the 7,300-page record, to discover that only two witnesses were placed upon the stand to testify concerning their

personal experiences with any so-called surprise tests.

As to the proposal in article 12 for assistance for firemen, the rail-roads stated that they had shown that practically all of the schedules in western territory already provided that coal should be broken to proper size before being placed on tenders, and that only 8.7 per cent of the mileage in eastern territory and but 9.1 per cent of the mileage in southeastern territory had such a provision. Manifestly, runs which were peculiarly burdensome for the fireman should be left to the individual roads and their men for adjustment in such manner as would fairly meet the peculiar conditions of such line.

The position of the railroads on the proposal contained in article 13 for two firemen was that in order that they might have accurate information as to the amount of physical labor required of firemen on the heaviest engines in use on the different roads the railroads caused a number of observations to be made on engines of the heavier type to ascertain whether on the engines on which two firemen were requested the physical labor required of the fireman was beyond the ability of a single man. The railroads' Exhibit 35, a tabulation of these observations, showed that on the average about 23 per cent of the fireman's time was taken up in actually shoveling coal on these heavier engines. The testimony proved, it was claimed, that on these locomotives where they were asking for two firemen the work was

On the proposal contained in article 14 for cleaning of locomotives the railroads stated that no witness was called on behalf of the employees who testified as to any practice on any western railroad where either the engineer or fireman was called upon to clean engines. Engineers and firemen had been relieved of practically all duties with reference to engines, and there was some short runs and small engines where the engineer and fireman received a day's pay for possibly three hours work, and that under these conditions it did not seem, it was stated, unreasonable for the railroads to ask the engineer and fireman to perform this work, thereby contributing in part to make

up the day for which they were paid under the schedules.

not now beyond the capacity of one man.

As to the proposal contained in article 15 for official record of weights on drivers, the railroads stated that there was no secrecy as to the record of all engines and no objection to furnishing the men this information.

As to the request contained in article 16, that of throwing switches and flagging, the railroads claimed that the only part of this proposal concerning which the employees offered any testimony was in connection with the throwing of switches. Three of their employees testified on this subject, and it did not seem, it was stated, that this testimony could hardly justify an award covering this entire territory, especially when there had been no effort to contradict the figures shown in railroads' Exhibit 3, sheet 2, that this request in a single month, it was claimed, would place an added burden on the railroads of \$80,381.98, which burden would fall largely on the railroads which had helper service in which the pay was shown by pay-roll figures to be extremely high. Attention was directed to the position taken by the firemen in the eastern arbitration in which the brief on their behalf stated as one of the reasons for the rates requested in pusher

and helper service that the pusher and helper fireman was required to perform also the duties of flagman or brakeman, there being no conductor, flagman, or brakeman with a helper or pusher locomotive.

In the general summary of their case the representatives of the railroads stated that the information assembled in railroads' Exhibits 26, 27, and 28, being a transcript of the pay rolls for the month in which the demands of the employees were presented (October, 1913), showed that the earnings of engineers and firemen were adequate. To meet the possible claim that the earnings for a single busy month were not fairly representative of the yearly earnings of the men in different classes of service, there was presented by the railroads the actual pay-roll earnings covering the entire year ending June 30, 1914, of certain men in each class of service on each seniority district of the railroad involved in the movement. These pay-roll figures were presented as railroads' Exhibits 41 and 42.

Compared with eastern engineers and firemen it was contended that western rates and rules for engineers and firemen worked out larger compensation to the men than the rates and rules which were established by separate arbitrations in the East. The western roads were paying the higher wage, it was claimed, notwithstanding the fact that the average trainload in eastern territory was 40 per cent greater than in western territory, and notwithstanding the claim advanced by the men that wages should be higher when trainloads

are heavier.

It must be conceded, therefore, it was argued, that comparison with rates, rules, and working conditions of engineers and firemen in the East can furnish no justification for creating a still wider spread between the East and the West than the one as now shown to exist between the Wabash, which pays western rates, and its parallel and competing lines—the Grand Trunk, Michigan Central, Lake Shore, Erie, Nickle Plate, Pennsylvania, Baltimore & Ohio, Big Four, Vandalia, Clover Leaf, and Pere Marquette—which pay eastern rates.

Applying the increases in pay requested to the operations for October, 1913, the effect of these proposals, the railroads asserted, was to change the engineers and firemen's pay rolls from \$7,214,320.93 to \$10,890,282.81. By giving to this month's operations only the importance which that month's pay roll bore to the pay roll for the entire year a reasonably accurate estimate of the increased expense, it was pointed out, could be made for the year. By the adoption of this method, it was shown by railroads' Exhibit 3 that the actual pay roll of engineers and firemen for the fiscal year 1914 was \$75,713,447.20, and one year's operation under these proposals would mean an added burden to the railroads of \$40,886,708.57.

### THE AWARD OF THE BOARD COMPARED WITH THE REQUESTS OF THE EMPLOYEES.

In the following pages a comparative statement has been prepared to show the difference between the rates of pay and working conditions requested by the employees which were made the basis of the arbitration agreement, and the rates of pay and working conditions authorized by the arbitration board. This comparison is made possible by printing in parallel columns a digest of the requests of the employees and the award of the board. Engineers' and Firemen's Western Arbitration of 1914-15—Comparative DIGEST OF THE AWARD OF THE BOARD AND THE REQUESTS OF EMPLOYEES.

REQUESTS OF EMPLOYEES.

AWARD OF THE ARBITRATION BOARD.

### ARTICLE I.—BASIS OF A DAY'S WORK.

Passenger service: One hundred miles or less, 5 hours or less, to constitute a day;

excess mileage, pro rata. All other service, except switching:

One hundred miles or less, 10 hours or less, to constitute a day's work; excess mileage, pro rata; 10 miles equal to 1

hour, or vice versa.

Passenger service: The minimum day's rate of pay shall be \$4.30 for engineers and \$2.50 for firemen.

One hundred miles or less, 6 hours 40 minutes or less, shall constitute a day's

work unless otherwise specified.

Overtime in excess of 100 miles, pro

### OVERTIME IN ROAD SERVICE.

Passenger: Overtime to be computed on a basis of 20 miles an hour, at rate of

class of engine used.

All other: Overtime in all other classes of service, except passenger and switching, will be computed on basis of 10 miles an hour, and paid for at rate of 15 miles per hour, according to class of engine used. All overtime will be computed on a minute basis.

On short turn-around runs, no single trip of which exceeds 80 miles, including suburban service, overtime shall be paid for time on duty exceeding 8 hours within consecutive hours, and also in excess of 12 hours computed consecutively from time required to report for duty until final release. Time to be counted as continuous service except in cases where release from duty exceeds 1 hour.

All other passenger overtime to be computed at 15 miles per hour; and separately for each part of a round trip run.

Passenger overtime to be paid for on a minute basis at the following rates: Engineers, 75 cents per hour; firemen, 45 cents per hour.

This award does not displace any existing arrangement as to overtime if employee wishes to retain his old basis

of employment.

Freight service: Minimum day's rate given in detail later under Article II.

Basis of a day's work, 100 miles or less,

10 hours or less.

Overtime to be computed on a basis of 10 miles an hour and paid pro rata on a

minute basis.

General: Engineers and firemen required to do different classes of road service on a single trip will be paid on a basis of time or miles in each class of service, but not less than a minimum day's pay for the highest class of service performed.

When engines of different weights on drivers are used on a single trip the highest rate paid on an engine used will be

the rate paid.

### ARTICLE II.

Rates for steam locomotives proposed in passenger service and in freight service, except switching, according weights on drivers. Special rates on Mallet types.

Lower rates allowed.

Pusher, helper, mine runs, work, wreck, and all other unclassified service, through freight rate according to class of engine.

On divisions where grade is 1.8 per cent or over, 10 per cent over valley rates requested.

On narrow gauge railroads an increase of 5 per cent over rates in effect is re-

quested.

Wherever electric, multiple unit, or gasoline is substituted for steam, engineers and firemen shall have the right to the positions of motormen and helper (this term means second man employed on locomotive). Seniority rights between these services and steam to be interchangeable. Steam rules, hours, and conditions of service to be interchangeable.

### AWARD OF THE ARBITRATION BOARD.

Allowed as originally requested, except belt line and transfer service. Board held that conditions were so variable in the West in belt line and transfer service that it could not reach any decision and referred the matter back to roads and men with the recommendation that they adjust it.

Not allowed. Existing differentials

retained.

Request declined.

On installing electric service, or on roads where it is now in effect, engineers and firemen given preference for positions so long as it does not interfere with men already holding positions prior to the arbitration.

Minimum day's rates in steam service awarded to those in electric service.

Board stated that in view of the fact that the electric service was in a state of development and there was no uniformity in practice it could not establish a system of rates and working conditions.

### ARTICLE III .- LOCAL OR WAY FREIGHT SERVICE.

Engineers and firemen to be paid 10 per cent increase over through freight rates.

Through or irregular freight trains doing switching or other local services to be paid for same at overtime rates in addition to their regular mileage. A mimimum of 30 cents per 100 miles to be added to through or irregular freight rates for local rates according to class of engine. Overtime or excess miles pro rata.

### ARTICLE IV .- SWITCHING SERVICE.

Minimum rates of pay requested according to class of engine:

	Engi- neers.	Fire- men.
Less than 140,000 pounds	\$4.75 5.00 6.00	\$3. 10 3. 25 4. 00

Engineers and firemen who are required to report for work other than between 6 a.m. and 8 a.m. to be paid 2 cents additional per hour.

Ten hours or less to constitute a day's work. Overtime at the rate of time and a half, computed on minute basis.

Engineers and firemen not to be required to work longer than 6 consecutive hours without an allowance of 30 minutes for meals.

	Engi- neers.	Fire- men.
Less than 140,000 pounds	\$4. 25 4. 40	\$2. 70 2. 75
275,000 pounds or less Over 275,000 pounds	5. 15 5. 40	4.00 4.00

Engineers and firemen shall be allowed one hour for meals between 11.30 a.m. and 1 p.m., and between 11.30 p.m. and 1 a.m., but if required to work the meal hour or any part thereof they will be paid for the hour in addition to the minimum day, and be allowed 30 minutes under pay for meals.

Allowed.

Existing rates of pay that are higher than the above minima are hereby awarded.

AWARD OF THE ARBITRATION BOARD.

### ARTICLE V.—PREPARATORY TIME.

Thirty minutes preparatory time in all classes of service to be allowed in addition to all other time or mileage on trip, at pro rata rate, according to class of engine and service; on roads where more than 30 minutes are required to report for duty before leaving roundhouse they will be given 1 hour's preparatory time pay, and where more than an hour is required before leaving, actual time will be allowed. Preparatory time is time engineers and firemen are required to be on their locomotive prior to time required to leave roundhouse or other point.

In all classes of service an engineer's or fireman's time will commence at the time he is required to report for duty, and end when locomotive is placed on designated track or delivered to hostler at terminal.

### ARTICLE VI.—TERMINAL DELAY.

Payment shall be made for all initial and terminal delay on a minute basis, according to class of service and engine.

Method of computing initial and terminal delay defined carefully.

Initial terminal delay denied except for the rule that time should be paid from time required to report for duty.

time required to report for duty.

Final terminal delay to be paid after a lapse of 30 minutes for full delay, according to overtime rate for class of service and locomotive. If road overtime has already begun, to apply to time of final release.

Methods described of computing terminal delay.

### ARTICLE VII.-AUTOMATIC RELEASE AND TIE-UP.

At the end of a run, engineer and firemen are automatically released; when used again, they begin a new day.

Continuous time to be paid between terminals; no deductions for tie-ups.

Denied.

Continuous time to be paid to point of tie-up. After that payments to be made on basis of 50 miles and 5-hour periods.

### ARTICLE VIII .-- HELD AWAY FROM HOME TERMINAL.

To be paid continuous time for all time held away from home terminal after the expiration of 15 hours from time relieved from duty, at the rate per hour for last service performed. In pool freight and unassigned service, continuous time to be paid when held away from home terminal after the expiration of 22 hours, from time last relieved from duty, at rate per hour for last service performed. If held 14 hours after the expiration of the first 32 hours, continuous time will be paid for the next 10 hours, and similarly for each succeeding 24 hours. Should an engineer or fireman be called for duty his time will be computed continuously.

### ARTICLE IX.

When deadheading on company's business, engineers and firemen will be paid the same rates as the crew of the engine of the train on which they are deadheading.

Specific rates per mile awarded for deadheading on company's business; no deadheading pay allowed while deadheading on seniority rights—provided that a minimum day will be paid at the rates specified within 24 hours from the time called to deadhead.

AWARD OF THE ARBITRATION BOARD.

### ARTICLE X.—HOSTLERS.

Hostlers to be maintained at points where an average of 6 or more locomotives are handled within 12 hours.

Hostling positions to be filled by firemen; pay to be \$3.35 per day of 10 hours or less. Hostlers required to make mainline movements to be paid \$4.75. When main-line hostlers are paid same rate as switching engineers, vacancies shall be filled by engineers.

One hour to be allowed for meals between 11.30 and 1.30, day or night. Hostlers shall be allowed 1 hour for meals in any event, after 5 hours service. When this hour is not granted pay will be given. No hostlers to remain on duty longer than 6 hours without an hour for a

meal.

Minimum day for hostlers will be \$4,20 per day of 12 hours or less; overtime pro rata. Engineers and firemen to have preference for positions of hostlers.

All roundhouse employees, except those who have a knowledge of road conditions, who spend 25 per cent of their time in handling engines will receive \$3 per day

of 12 hours or less.

Where firemen's organization have negotiated schedules for hostlers, rights contained in schedules shall not be superseded by this award.

### ARTICLE XI.—SURPRISE TESTS.

Certain surprise tests to be eliminated.

Surprise or efficiency tests shall not be conducted under conditions hazardous to employees.

### ARTICLE XII.—ASSISTANCE FOR FIREMEN.

Coal of proper size to be placed on

Coal shall be kept where it can be reached by the fireman from deck of locomotive.

Awarded.

Coal to be shoveled forward at specified points, or by man riding on the locomotive for that purpose, so that it can be reached by firemen from deck of locomo-tive, committees of the men to take up and determine this matter with officials of the roads.

### ARTICLE XIII.-Two FIREMEN.

On coal-burning locomotives 185,000 pounds or over on drivers, when used in freight service, two firemen will be employed.

When a second fireman is deemed necessary on freight locomotives weighing 200,000 pounds or over on drivers, the matter is to be taken up with the officials of a road. Failing to reach an agreement, it is to be adjusted by a commission of 5 members.

When two firemen are so employed they shall each be paid the rate of the engine of the group below. (Art. II.)

### ARTICLE XIV.-MISCELLANEOUS.

Firemen to be relieved of the cleaning of locomotives on all roads.

Firemen and engineers shall be re-lieved from setting up wedges, etc., where competent roundhouse force or engine watchman is employed.

Engine crews shall not be required to place on or remove tools, etc., where competent roundhouse force or engine watchmen are employed.

Awarded.

Awarded.

Awarded.

AWARD OF THE ARBITRATION BOARD.

ARTICLE XV.—RECORDS OF WEIGHTS ON DRIVERS.

Awarded.

Railroads to post at terminals weights on drivers of locomotives in its service.

### ARTICLE XVI.

Engineers or firemen will not be required to throw switches, flag through blocks, or fill water cars.

Owing to complexities of services on different roads board found itself unable to formulate a general rule on this topic.

### GENERAL REGULATIONS.

"Saving clause" awarded. Engineers or firemen denied the right to select one rule from the award or rate and couple it with an old rule or rate.

### MEMORANDUM FILED BY CHAIRMAN PRITCHARD.

Chairman Pritchard, in an explanatory statement, said that freight rates and yard rates for engineers and firemen, awarded by the board, not so high as they should be; conceived it his duty to sign the award, however, so that the men might secure the other substantial benefits which the award gave.

### STATEMENT BY RAILROAD ARBITRATORS, MESSRS. PARK AND BYRAM.

The agreement under which the arbitration took place was lopsided and permitted of standardization upward only. It could not, therefore, be called real standardization of dissimilar rules and

As a consequence they signed the award in order that there might be an award and in order to sanction arbitration as a method of settling industrial disputes.

### STATEMENT OF EMPLOYEES' ARBITRATORS, MESSRS. SHEA AND BURGESS.

(1) Increase in cost of living and changes in methods of train

operation since 1910 should be recognized.

(2) Award indefensibly based on engineers' eastern award, which stated itself that it had to proceed upon inaccurate and fragmentary statistics of Interstate Commerce Commission. Eastern award. moreover, not suited to western conditions.

(3) Board in its award disregards evidence submitted as to hours.

tonnage, and increased work and productive efficiency.

(4) Reviews evidence of men.

(5) A great opportunity of bringing about industrial peace lost.(6) Monthly earnings are large in some cases, but they are the result of excessive hours of work, not high rates of pay.

(7) Minimum rates awarded will in reality become maximum

rates.

(8) Award settles nothing, makes necessary further demands; will bring chaos and unrest to industrial world.

EFFECT OF APPLICATION OF AWARD OF ARBITRATION BOARD ON INDI-VIDUAL RAILROADS.

No uniform basis for the payment of locomotive engineers has up to the present time been adopted in the territory east of the Ohio and north of the Potomac rivers. Some railroads classify their rates of pay according to the size of cylinders; others according to weight on drivers; still others according to the number of wheels and according to the trade name of the engines. Not until the year 1913 were the rates of pay to locomotive firemen in the eastern territory standardized according to weight on drive wheels, and the same basis of payment both to engineers and firemen in the West was not adopted until the year 1915. As a consequence it was impossible, with the printed working schedules as a basis, to make any comparative study as to how rates of pay to engineers and firemen were affected by awards of arbitration boards. Methods of wage payment were frequently changed by the application of the decision of arbitration boards.

Under these conditions it was decided to use as a basis of comparison of rates of pay the classification of locomotives required by the Interstate Commerce Commission. Up to the fiscal year 1915 this classification was uniformly used by the railroads in reporting to the commission. In the following comparisons the figures relative to the number of locomotives and their average weight on drivers (tons) prior to the fiscal year 1915 are based on information secured from pages 103 to 107 of the annual reports of the carriers to the Interstate Commerce Commission. In the form of annual report adopted for use in 1915 there were considerable changes made throughout, and locomotive classification was furnished in a different manner by the carriers. Because of this variation it was necessary to request the railroad companies to furnish data on locomotive equipment that would be comparable with prior years.

After the information as to number and weight of locomotives in the various classifications was secured from the annual reports of the railroads to the Interstate Commerce Commission printed forms were mailed to the companies to be filled out. Each sheet was divided into three similar sections, providing for single expansion, four-cylinder compound, and two-cylinder compound or cross-compound locomotives. The information requested from the carriers

was as follows:

(a) Class of service in which each locomotive was engaged.

(b) Number of locomotives of each class.

(c) Rates of pay per day of 100 miles or less or 10 hours or less to (1) engineers, (2) firemen.

Because of the change in the 1915 reports, mentioned above, a special sheet for this year was prepared and sent to the railroad companies requesting, in addition to the other inquiries listed, the average weight (tons) on drivers of locomotives. The printed forms sent to the railroads were for the fiscal years prior and subsequent to any arbitration proceedings they were involved in, either with their engineers or firemen.

In the following derivative tables, rates of pay to locomotive engineers and firemen are shown prior and subsequent to the award of the arbitration board in western territory of April 30, 1915.

Rates paid to locomotive engineers and firemen before and after the arbitration of 1915, and amount and per cent of increase in rates awarded by the arbitration board according to class of engines.

## ATCHISON, TOPEKA & SANTA FE RY.

### SWITCHING SERVICE.

			Ave	rage		Rate p	er day of 1	00 miles o	r less o	r 10 he	Rate per day of 100 miles or less or 10 hours or less to—	to-
	un Z	Number.	drivers (tons).	ers is).		E	Engineers.				Firemen.	
Class.							Increase.	ase.			Incr	Increase.
	1914	1915	1914	1915	1914	1915	Amount. Per cent.	Per cent.	1914	1915	Amount.	Per cent.
Class A2, OO> (oil). Strong City and Bazar, Kansa	2	7	50	50	\$4.50				\$2.55			
First-class yards * Second-class yards *					4.70				2,50			
140,000 pounds and over on drivers.						4.40				2.75		
Oil	35	89	65	69								
Strong City and Bazar, Kans. <sup>1</sup> . First-close words 2		00 :	3	5	4.50				2.55			
Second-cass yards. I see than 140 000 rounds on drivers					4.00	20 1			2.40	2,00		
140,000 pounds and over on drivers	1	1	70	70		4.40				2.75		
Strong City and Bazar, Kans.1.  First class words 2		-	2		4.50				2.55			
Second-class yards					4.00				2, 40			
140,000 pounds and over on drivers						4.40				2, 75		

<sup>1</sup> Special rate account partially road service.

<sup>2</sup> First-class yards, all others second-class yards: Chicago, Ill.; Shopton, Iowa; Kansas City, Mo.; Topeka, Kans.; Argentine, Kans.; Emporia, Kans.; Arkansas City, Kans.; Chautte, Kans.; Wellington, Kans.; Dodge City, Kans.; Newton, Kans.; Marx.; Vellington, Kans.; Newton, Kans.; Newton, Kans.; Max.; Winslow, Ariz.; Las Vegas, N. Mex.; Winslow, Ariz.; Seligman, Ariz.; Los Angeles, Cal.; Bakersfield, Cal.; Richmond, Cal.; Needles, Cal.; Barstow, Cal.; San Bernardino, Cal.; Fresno, Cal.; San Francisco, Cal.; El Paso, Tex.

Rates paid to locomotive engineers and firemen before and after the arbitration of 1915, and amount and per cent of increase in rates awarded by the arbitration board according to class of engines-Continued.

# ATCHISON, TOPEKA & SANTA FE RY.-Continued.

SWITCHING SERVICE-continued.

				-							
	;		Average veight of		Rate p	Rate per day of 100 miles or less or 10 hours or less to—	00 miles or	r less or	: 10 ho	irs or less	to-
	Number.		drivers (tons).		A	Engineers.				Firemen.	
Class.						Increase.	ase.	7 50 5	h G	Inc	Increase.
	1914	1915 1	1914 1915	.5 1914	6181	Amount. Per cent.	Per cent.	1914	0161	Amount.	Per cent.
Class C3, 00000>  Oil  Coal. Strong City and Bazar, Kans.1 First-class yards 2 Second-class yards Less than 140,000 pounds on drivers. Class C4, 000000> (oil) Strong City and Bazar, Kans.1 First-class yards Second-class yards Less than 140,000 pounds on drivers Less than 140,000 pounds on drivers Less than 140,000 pounds on drivers	350	920	24 23 24 24 24 24 24 24 24 24 24 24 24 24 24	\$45 \$4.50 \$4.50 \$4.25 \$4.25 \$4.50 \$4.50 \$4.50	84 25 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			22.55 22.55 22.55 25.55 25.55	\$2.70 2.75 2.75 2.75		

<sup>1</sup> Special rate account partially road service.

<sup>2</sup> First-class yards, all others second-class yards: Chicago, Ill.; Corwith, Ill.; Shopton, Iowa: Kansas City, Mo.; Topeka, Kans.; Argentine, Kans.; Emporia, Kans.; Arkansas City, Kans.; Chante, Kans.; Melington, Kans.; Dodge City, Kans.; Newton, Kans.; La Junta, Colo.; Pueblo, Colo.; Raton, N. Mex.; Las Vegas, N. Mex.; Albuquerque, N. Mex.; Winslow, Ariz.; Seligman, Ariz.; Los Angeles, Cal.; Bakersheld, Cal.; Richmond, Cal.; Needles, Cal.; Barstow, Cal.; San Bernardino, Cal.; Freeno, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.; Barstow, Cal.;

### ATCHISON, TOPEKA & SANTA FE RY .- Continued.

PASSENGER SERVICE.

51393°-S. Doc. 493, 64-1-

			Increase.	t. Per cent.				9 80		* * * * * * * * * * * * * * * * * * *	3,6	0 0 0	
		Desert.	Ţ	Amount.				\$0.15	00.		.15	8.	
	ø		14 C	1910				\$4,30	4.40		4.30	4.40	
	rritorie		7101	1914				<b>\$</b> 4. 15	4.40		4,15	0.0   4.40   4.40	
	Rate per day of 100 miles or less or 8 hours or less to engineers in specified territories.		ease.	Per cent.				9 8	0.0		9,6	0.0	
	gineers in s	Valley.	Increase	Amount.				\$0.15	00.		.15	90.	Railway.
	to eng		1	ciai				\$4.30	4.40		4.30	4.40	inta Fe
	or less		7,01	1914				\$4.15	4.40		4.15	0.0 4.40 4.40	le & Sa
	or 8 hours		sase.	Per cent.			0 0 0		0.0		3,6	0.0	Panhand
	iles or less	Mountain.	Increase.	Amount.				\$0.15	00.		.15	00.	allway and
	f 100 m	M	h G	cigi		:		\$4.30	4.40		4.30	4.40	Fe R
	day o		7,0	1914				\$4.15	4.40		4, 15	0.0   4.40   4.40	Santa
	Rate per		sase.	Per cent.				9 %	0.0		3.6	0.0	Topeka &
		Plains.	Increase.	Amount. Per cent.				\$0.15	00.	* * * * * * * * * * * * * * * * * * *	.15	0.	ı All territories on Atchison, Topeka & Santa Fe Rallway and Panhandle & Santa Fe Rallway.
			, ,	6181				84.30	4.40		4.30	4.40	ries on
				1914				\$4.15	4.40		4, 15	4.40 4.40	territo
	Average age weight	drivers (tons).		1914 1915 1914 1915 1914		32	32	:		200			1 All
-				161 21	1	31 32		:		30 50			
	Num- ber.			914 19	<u> </u>	25		:		42 34	:		
		Class.			SINGLE-EXPANSION LOCOMOTIVES.		Less than 18-inch cylinders and 100,000	pounds on drivers 1. 18-inch cylinders and over and less than	no spunod		Less than 18-Inch cyl- inders and 100,000 pounds on drivers <sup>1</sup> .	over and less than 170,000 pounds on drivers.	

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

#### PASSENGER SERVICE—continued

,		, '			1		. 9	0				
			Increase.	Per cent.			3.6	0.0				3.6
		Desert.	Incr	Amount.			\$0.15	00.				.15
				- 6161	,		\$4.30	4.40	4.45			
	tories.			1914			\$4.15	4.40				3.6 4.15 4.30
	l terri		,			<u></u>		0.0	2,3			
	pecifie		sase.	Per cent.			.ც. მ		,			3.6
	Rate per day of 100 miles or less or 8 hours or less to engineers in specified territories.	Valley.	Increase.	Amount.			\$0.15	00.	.10			.15
	to engi		1	- 6161		i	\$4.30	4.40	4.45		i	4.30
	or less			1914			\$4.15	4.40	4.35			4.15
	ours o			Per cent.			9 %	0.0	0.0			3.6
	s or 81		Increase.									
	iles or les	Mountain.	Inc	Amount.			\$0.15	00.	00.			.15
	100 m	M	, ,	1915			\$4.30	4. 40	4.65			4.30
	day of			1914			\$4.15	4.40	4.65			4, 15 4, 30
	Rate per		ase.	Per cent.			3.6	0.0				9.6
		Plains.	Increase.	Amount.			\$0.15	00.				.15
		H	1	- 6161			\$4.30	4.40	4. 45			4.30
				1914			\$4.15	4.40			:	4.15
	er- e ght	ers	1	1919				:			2000	
		drivers (tons).	2	51914		68					56	
	Num- ber.		7	1914 1919 1914 1915		12 12		<u> </u>			16 41 156 131	
		Class.			SINGLE-EXPANSION LO- COMO ITVES—CORIG.	Class F3, 000000>:	1 1 0 1 - 1	170,000 pounds on drivers 1 18-inch cylinders and	170,000 pounds on drivers <sup>2</sup> Do. <sup>3</sup>	FOUR-CYLINDER COM- POUND LOCOMOTIVES.	Class F2, 00000>:	-18-

0.0	3.6	0.0		0.0
0.0				
8.	.15	8.		8
00.				00
4.40	4.30	4.40	4. 45	5.15
-		4.40 4		
4.40	4.15			5.15
0.0	3.6	0.0	23	0.0
				1 1 1 1
8.	.15	9.	.10	00
4.40	4.30	4.40	4. 45	5. 15
4.40	4.15	4.40	4.35	5.15
0.0	3.6	0.0	0.0	0.0
0.0				000.000
00	15	8.	8	98
		•		
4.40	4.30	4.40	4. 45	5. 40
4.40	4.15	4.40		5.55
	3.6	0.0		0.0
0.0		Ū	4.65	
	. 15	8.		8
00.		•		00.
9 :	4.30	4.40	4. 45	5. 15
4.	1		4	
4.40	4.15	4.40		5, 15
79	<del></del>			134
8	88			134
22	72			!!!
. 28	71		- : :	
		on	00 on	000 TS 3.
18-inch cylinders and over and less than 170,000 pounds on drivers! Class F3, 000000>:	Coal.  Less than 18-inch cylinders and 100,000 pounds on drivers 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 18-inch cylinders and 1	170,000 pounds on drivers <sup>1</sup>	Over and over 170,000 pounds on drivers?  Class E5, 0000-000> (Mallet):	Coal.  Coal.  Less than 275,000  pounds on drivers 3  Do.4  Do.2
plino pou pou	and on con	pon	pou pou 2 000.	an on o
ch c sr ar 000,000 vers	than lers inds	vers	70,000 p lrivers 2. Do. 3. E5, OOC Mallet):	s than bunds on c Do.4 Do.2
170 dri Fr3,	Coal. Less ind por Por Por	Phi Phi	AE TIO	Pour Pour Pour Less
Class		_	Class	J J H

1 All territories on Atchison, Topeka & Santa Fe Railway and Panhandle & Santa Fe Railway.

\*\*Nest of Winslow, Ariz., only.

\*\*All territories on Archison, Topeka & Santa Fe Railway, and Panhandle & Santa Fe Railway, except between Pueblo, Colo., and Denver, Colo., and west of Winslow, Ariz.

\*\*Bell territories on Atchison, Ariz.

\*\*Bell territories of Olo., and Denver, Colo.

# ATCHISON, TOPEKA & SANTA FE RY.-Continued.

PASSENGER SERVICE-continued.

Rate per day of 100 miles or less or 8 hours or less to firemen in specified territories.	Valley. Desert.	Increase.	Per cent. Per cent. Per cent. Per cent. Per cent.				4. 0 \$2.50	19, 40, 29, 50, 10, 4, 9, 19, 40, 29, 50, 10, 4, 9		0.0 6.9 8.5 7.9 8.5 0.0 0.0 6.9 8.5 7.9 8.5 0.0
0 miles or 1	Mountain.		Amount.		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		60 \$0.10		00 . 10	
y of 100			4   1915			9	0 432.60		0 42.60	0 62 65 77 65
per day		1 3	- 1914				\$2.50		32.50	6.0
Rate I		Increase.	Per cent.					. 6.4		
	Plains.	Incr	Amount.			\$0.10		10		9
		1 Y	1915			\$2.50		2.50		2,65
	,	3	1914			1\$2.40 2\$2.50	:	12, 40 22, 50		50
Average	on drivers (tons).		1914 1915 1914 1915 1914		88		:	;		
			15 191		31 62 32 32		:			:
	ber.		914 19		65.3 66.33 66.33		:	:		6 6 6
	Class.		SINGLE EXPANSION LO- COMOTIVES.	Class C2, 0000>: Oil. Coal.	Oil-burners— Less than 18-inch cylinders and 80,000 pounds on drivers.	Do	Less than 18-inch cylinders and 80,000 and 1ess than 100,000 p our d's on	Do	18-inch cylinders and over and 100,000 to 140,000 pounds on drivers	

4,	ස ර	0.0	4 2	4.2	0.0
01.	.15	00.	.10	01.	00
22.50	2. 2. 55	. 65	22.50	2.50	2. 65
2.40	2. 40	2. 65 72.	2.40 3	2.40	0.0 62.65 72.65
2, 4,	6.3	0.0 62.65	4.2	. 4.2	0.0
01.	.15	00.	.10	01.	8
2 2. 50	22.55	7.2.65	22.50	22.50	7 2. 65
12.40 22.50 24.50	12.40 32.50 52.45		12.40 22.50 2.50	12.40 32.50 52.45	0.0 62.65 72.65
4.0	6.0	0.0	. 0.4	4.0	. 0.0
.10	.15	00	.10	01.	00
4 2. 60	42.65	72.65	12.60	12.60	7 2. 65
12.40	12.40 32.50	62.65	12. 40 32. 50	12.40 2.50	0.0 62.65 72.65
2.4	හ ජ	0.0	4; 53	2.4	0.0
.10	.15	00 ·	010	01.	00.
2 2: 50	22.55	72.65	2 2. 50	2.50	7 2. 65
12.40	12.40	* 2. 65	1 2. 40	12.40	62.65 72.65
		50			
- ::		50	1 1		
		37 47			
Coal-burners— Less than 18-inch cylinders and 80,000 pounds on drivers Do.	Less than 18-finch cylinders and 80,000 and less than 100,000 p o un d's on drivers. Do-	nders and to ounds	Oil-burners— Less than 18-inch cylinders and 80,000 pounds on drivers. Do.	Less than 18-inch cybinders and 80,000 and less than 100,000 p o u nd s on drivers.	18-inch cylinders and over and 100,000 to 140,000 pounds on drivers.

Chicago to Canon City, including branches.

2 All territory except between La Junta, Colo., and Raton, N. Mex.: Las Vegas and Albuquerque, N. Mex.

4 Euble to Derwer, Colo., La Junta to Raton, N. Mex.; Las Vegas to Albuquerque, N. Mex.; Clovis to Belen, N. Mex.; and south of Albuquerque, La Junta to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.

6 Raton to Las Vegas, N. Mex.

8 All territory except between Pueble and Derver, Colo.

9 All territories.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

PASSENGER SERVICE-continued.

Av	Increase. Increase.	<b>a</b>		182.40   182.50   80.10   4.2   182.40   80.10   4.0   182.50   182.50   80.10   4.0   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   182.50   80.10   4.2   18	G-17-77	 62.65.72.65 00 0.0 62.65.72.65 00 0.0 65.85.79.85	
	à i	<b>a</b>					ss F3, 0000000>: 12 12

7	0.0		0 1		0.0				0.0		
01.	8.	1	0 1		90.				00.		
22.50	62.65	1			112.80		:		112.80		-
12.40	0.0 62.65				122.80		:		0.0 122.80		
4.2	0.0			0.0	0.0				0.0		
.10		) ) ) 0 0 0		90.	00				90.		
22.50	62.65			102.85	112.80		:		112.80	92.70	
12.40 32.50	62.65	1		32.85	122.80		:		122.80		
4.0	0.0			0.0				1.8			
01.	88		0 0	88		b b c c c c c c c c c c c c c c c c c c		88			
2.60	6.2. 65 8.2. 85			42.85	100 05	20.7		42.90	:		102.85
12.40 2.50	8 2. 65 8 2. 80			\$2.85		* * * * * * * * * * * * * * * * * * * *	8 2 94	\$2.85	:		:
2.	0.0	0.0									-
.10	90.	00									
22.50	62.65	2, 65				9.2.70					.,
12.40	62.65	62,65				62.65					
					:						_:
			:	: :	:				: :	:	
				: :	:				: :		-:
sthan 18-inch ylinders and e s s th a n 00,000 pounds n drivers.	18-inch cylinders and over and less than 140,000 pounds on drivers.	inch cylinders and over and 140,000 to 170,000 pounds on drivers.	Do	Do. Do.			$D_0$	Do.			
Oll-burners— Less than 18-inch cylinders and 16 s th an 100,000 pounds on drivers.	18-inch cylinders and over and 16 s s th a n 140,000 pounds on drivers	18-inch cylinders and over and 140,000 to 170,000 pounds on drivers.	Do	Do	Do	18-inch cylinders and over and 170,000 to 200,- 000 pounds on drivers	Do	D0	Do	Do	 D0
0											

1 Chicago to Canon City, including branches.

2 All territory except between La Junta, Colo., and Raton, N. Mex.; Las Vegas and Albuquerque, N. Mex., and south of Albuquerque, P. Mex.; Clovis to Belen, N. Mex., and south of Albuquerque, R. Mex.; Clovis to Belen, N. Mex., and south of Albuquerque, N. Mex.; Clovis to Belen, N. Mex., and south of Albuquerque, N. Mex.

4 La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.

6 All territory except between Pueblo and Denver, Colo.

7 All territory except between Pueblo and Denver, Colo.

8 Pueblo, Colo., to Penver, Colo.

9 Chicago to Canon City, C. Lo.; Wellington, Kans., to Pecos, Tex., including branches.

10 Pueblo and Denver, Colo.; Clovis to Belen, N. Mex., and Bakersfield, Cal.

11 Raton to Las Vegas, N. Mex.; Albuquerque, N. Mex., and Bakersfield, Cal.

12 Albuquerque, N. Mex., to Bakersfield, Cal., only.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

PASSENGER SERVICE—continued.

			ise.	Per cent.			6.3		0.0			0.0	
		Desert.	Increase.	Amount.			\$0.15		00.			00	,
	r,		i d	6161			282.55		62,65			102.80	
	ritorie		,	1914			1\$2.40 2\$2.55		62.65			112.80 102.80	
	ecified ter		ase.	Per cent.			6.3		0.0			0.0	
	Rate per day of 100 miles or less or 8 hours or less to firemen in specified territories.	Valley.	Inerease.	Amount. Per cent.			\$0.15		00.			00.	
	s to fir			1915	,		2\$2.55	:	62.65	:		9 2.85	
	s or les			1914			1\$2.40 3.2.50	5 2, 45	62,65			32.85 112.80	
	s or 8 hour		sase.	Per cent.			6.0		0.0	0.0		0.0	
	ailes or les	Mountain.	Increase.	Amount.			\$0.15		00.	36.		.00	
	я 100 г	A		1915			482.65		62.65	2 2 2		42.90 102.80	92.85
	r day o			1914			1\$2.40 3.2.50		62,65	0% %	72.94	\$2.85	
	Rate per		ase.	Per cent.			6.3		0.0		1.9	4 1 1	
		Plains.	Increase.	Amount.			\$0.15		00		.05		-
				1915			2\$2.55		62.65		82.70		
							1\$2,40 2		62.65		62.65 8		
	Average	on drivers (tons).		15 1914 1915 1914									
				1915 191									-
6	;	ber.		1914 191						:			-
		0.1388			SINGLE-EXPANSION LO- COMOTIVES—continued,	Class F3,000000>—Con. Coal burners— Less than 18-inch cylinders and less than 100.	000 pounds on drivers.	Do 12 inch evlinders	and over and less than 140,000 pounds on drivers.	18-inch cylinders and over and 140,000 to 170,-	drivers	Do Do	Do

9. 9. 9. 900		~	0
	4	4;	0.0
	.10	.10	8.
	20	20	65
102.85		2.2.	5 62.65
112.80	12,40	12.40	62.65
	63 4	4,	0.0
.05	.10	01.	00.
102.85 8.2.85	22.50	2 2. 50	62.65
8 2, 85	12. 40 32. 50 62. 45	12.40 2 2 2 50 2 2 45 2 45 2 45 2 45 2 45 2	62.65
7.0 %	1 0 4	4.0 %	0.0
0.50	01.	.10	8.6.
102.85 102.85 102.85	12.60	12.60	2.65
22.85	2.40	2.40	62.65 72.80
2.7.5		2.1	0.0 %
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. 20	01.	.10	00.
82.85	22.50	22.50	62.65
62.65	12.40	12.40	62.65
UD	555	111	80
	56 49	: : :	::
	131		
	16 41		1 1
Oll burners— 18-inch cylinders and over and 170,000 to 200- 000 pounds on drivers Do Do Do Do Do Do Do Do Do Do Do Do Do		Less frant Britch cylinders and 80,000 and less than 100,000 pounds on drivers.	on on

1 Chicago to Canon City, including branches.

2 All territory except between La Junta, Colo., and Raton, N. Mex.; Las Vogas and Albuquerque. N. Mex.; Mex.; and south of Albuquerque.

2 All territory except between La Junta to Raton, N. Mex.; Las Vogas to Albuquerque, N. Mex.; Clovis to Belen, N. Mex.; and south of Albuquerque, N. Mex.

4 La Junta, Colo., to Raton, N. Mex.; Las Vogas, N. Mex., to Albuquerque, N. Mex.

6 All territory except between Pueblo and Denver, Colo.

7 Rueblo, Colo., to Davers, Colo., Wellington, Rans., to Pecos, Tex., including branches.

8 Chicago to Canon City, Colo.; Wellington, Kans., to Pecos, Tex., including branches.

9 Pueblo and Denver, Colo.; Clovis to Belen, N. Mex., and South of Albuqquerque, N. Mex.

11 Albuquerque, N. Mex., to Bakersfield, Cal., only.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

#### PASSENGER SERVICE-continued.

		å	Per cent.			4.2		c q	0.0		o o	
	ert.	Increase.	Amount. Pe			\$0.10		a.	•		00.	
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rritori			1914	•		4.2 1\$2.40 2\$2.50		6			6.2.65	
ecified te		Increase.	Amount. Per cent.			4.2		0	0.0		0.0	
emen in sp	Valley.	Incr	Amount.			\$0.10		à.	cr.		90.	
s to fire		1	cigi			\$2,50		h h			2.65	
or less			1914	,		1\$2.40 2\$2.50	2,45		22.50	G	2.65	
or 8 hours		ase.	Per cent.			4.0			6.0		00	
Rate per day of 100 miles or less or 8 hours or less to firemen in specified territories.	Mountain.	Increase.	Amount.			\$0 10			.15		38	
f 100 m	M		6181	·		48.9 60			42.65		72.80	-
day o			1914			4.2 1\$2.40		9.0	2.50		72.80	
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			- 6181			\$2,50		l L	2.2.33		6 2. 65	
						1\$2, 40 2\$2, 50		9	2.40		2.65	
erage eight	drivers (tons).		915 1914 1915 1914			1					6,	81
Average weight	drivers (tons).		5.1914			:					08	_
Num	ner.		1914 191						::		85	-
	Class.		4	FOUR-CYLINDERCOMPOUND LOCOMOTIVES—CORtd.	Class F2, 00000>—Con. Coal burners— Less than 18-inch cylinders and			80,000 and less than 100,000 pounds on	Do.	18-inch cylinders and over and less than 140,	11 1	Coal

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01.	00.			00		90	
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4.0	0.0	1	0.0			1.8 0.0	
.10	8.8.		88			30.	
42.60	62.65 72.80		102.80	9 2.85		42.90 102.80	9 2.85
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2.4	0.0	0.0			1.9		
.10	00.	00:			. 05		
2.50	62.65	8 2. 65			32.70		
2.40 22.50	52.65 62.65	62.65			32.65		
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burners— Less than 18-inch cylinders and less than 100,000 pounds on drivers ors Do	18-inch cylinders and over and less than 140,000 pounds on driv- ers.	18-inch cylinders and over and 140,000 to 170, 000 pounds on drivers.	Do Do	Do Do inch ordinders	and over and 170,000 to 200, 000 pounds on drivers.	Do Do	Do.

1 Chicago to Canon City, including branches.

2 All territory except between La Junta, Colo., and Raton, N. Mex.; Las Vegas and Albuquerque., N. Mex.; and south of Albuquerque.

2 All territory except between La Junta, Colo., and Raton, N. Mex.; Las Vegas to Albuquerque, N. Mex.; Clovis to Belen, N. Mex.; and south of Albuquerque, N. Mex.; Clovis to Belen, N. Mex.; and south of Albuquerque, N. Mex.

5 All territory except between Pueblo and Denver, Colo.

7 Pueblo, Colo., to Barver, Colo.

7 Pueblo, Colo., to Denver, Colo.

8 Pueblo and Denver, Colo.; Clovis to Belen, N. Mex., and south of Albuquerque, N. Mex.

10 Raton to Las Vegas, N. Mex.; Albuquerque, N. Mex., and Bakersfield, Cal.

11 Albuquerque, N. Mex., to Bakersfield, Cal., only.

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FE	ntin
FOPEKA & SANTA FE RY	RVICE-Co
\$	SERVI
TOPEKA	ASSENGER
ATCHISON, 7	T.

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ecified te		Increase.	Per cent.				6.3		d				0.0	0.0
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s to fir			0161				2\$2.55		è	60.4			2.85	102.30
or less		1	1914					52.45		7.09				2.80
or 8 hours		ase.	Per cent.					0.0		00			0.0	
Rate per day of 100 miles or less or 8 hours or less to firemen in specified territories.	Mountain.	Increase.	Amount.					¢0.T0	8	38			88	
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							1\$2.40 2\$2.55	:				2.65		
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	Class.	1		FOUR-CYLINDER COMPOUND LOCOMOTIVES-COD.	Class F3000000>—Con. Coal burners— Less than 18-inch	cylinders and less than 100,-	drivers	Do	18-inch cylinders and over and less than 140,000 pounds on driv-	Do	and over and 140,000 to 170,000 pounds on		Do	

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1 Chleago to Canon City, including branches.

2 All territory except between La Junta, Colo., and Raton, N. Mex.; Las Vegas and Albuquerque, N. Mex.

2 All territory except between La Junta, Colo., and Raton, N. Mex.; Las Vegas to Albuquerque, N. Mex.; Clovis to Belen, N. Mex., and south of Albuquerque, N. Mex.

La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.

Raton to Las Vegas, N. Mex.

All territory except between Pueblo and Denver, Colo.

Pheblo, Colo., to Denver, Colo.; Wellington, Kans., to Pecos, Tex., including branches.

Pheblo, Colo., to Denver, Colo.: Wellington, Kans., to Pecos, Tex., including branches.

Pheblo and Denver, Colo.: Clovis to Belen, N. Mex., and Bakersfield, Cal.

In Albuquerque, N. Mex., to Bakersfield, Cal., only.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

#### FREIGHT SERVICE.

Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Charles   Char		Num-		Average weight on	9,1		Plains.	Rate per	day of	[ 100 mi	niles or less	Rate per day of 100 miles or less or 10 hours or less to engineers in specified territories.    Mountain,   Valley,	s or les	s to en	gineers in Valley.	specified te	rritori	.se	Desert.	
1914   1915   1914   1915   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   1915   Amount.   Per cent.   1914   Amount.   Per cent.   1914   Amount.   Per cent.   1914   Amount.   1914   Amount.   Per cent.   1914   Amount.   1914   Amoun	Class.	7007		river fons).	ν.		Inc	rease.			Incre	3886.			Incr	ease.			Incr	Increase.
1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1915   1914   1914   1915   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914   1914		-		_						1915			1914	1915			1914	1915		
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1,50, 20 1 Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1914).

\* Chorago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla., including branches (1916).

\* Chorago to Canon City, Colo.; Wellington, Kans., to Wax, and Rio Canade division east of Deming, N. Mex., to Blean, N. Mex., and Rio Canade division east of Deming, N. Mex., to Las Vegas, N. Mex., to Blean, N. Mex., to Blean, N. Mex., to Blean, N. Mex., to Blean, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to San

9 Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs. 8 West of Winslow, Ariz., and lines south of Ashfork, Ariz. 7 Albuquerque, N. Mex., to Bakersfield, Cal.

Pueblo, Colo., to Denver, Colo., and west of Deming, N. Mex. I La Junta, Colo., to Raton, N. Mex. Las Vegas, N. Mex., to Albuquerque, N. Mex. 2 Chicago to Canon City, Colo.: Wellington, Kans., to Waynoka, Okla.

13 Waynoka, Okla., to Pecos, Tex.
14 Pueblo, Colo., to Denver, Colo., Raton, N. Mex., to Las Vegas, N. Mex.
15 La Junta, Colo. to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., west of Deming, N. Mex.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

Englatt SpinAtch—Coloured.	Rate per day of 100 miles or less or 10 hours or less to engineers in specified territories.	Plains. Wountain. Valley. Desert.	Increase. Increase. Increase.	Amount. Per cent.		85 \$0.00 0.0 8\$4.85 \$0.00 0.0 0 8\$4.95 \$0.00 0.0 8\$4.95 \$0.00 0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.	0.00		0.00	125.20   125.20   0.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	5 5.30 5 5.30 5 5.30
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		Num- ber.		1914 1915 1914 1915	9 10		60 67 160 140				
		C	Ciass.		BINGLE EXPANSION LOCO- MOTIVES—continued. Class (2, 0000>: Oil.		Class C3, OOOoo>: Oil Coal Less than 100,000 Dounds on drivers.	00000000000000000000000000000000000000	Do Do 100,000 pounds or over on drivers.	30000 AAAAA	000 D00 D00

Carlo   Part   Carlo   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part							c, coal runs (1914). Puebio to Denver,
1.   1.   1.   1.   1.   1.   1.   1.							x., coal
Ray about   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray   Ray				60		6 5. 60	N. Me (1914).
1.   2.   2.   2.   2.   2.   2.   2.	65.60		6 5.60				Hebron Fr, Colo.
Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig. a 00000>:   Fig.							to Denve
F3, 00000>:							lo.; Blossi olo, Colo., olo west of N. Mex.
Fig. 60000>:   26   71   70   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05				55.15		5.15	ille, Co
Fig. 60000>:   20   71   70   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05	5.15	6 5.15					Starky N. Mex ex. (19 Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Mex.  Me
F3, 00000>:				5			os, Tex.; uning, N. Ming, N. M
F3, 00000>:   P3							Pec t of Dem Der De Al
F3, 00000>:   69   26   71   70   15.05   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15.50   15							a., to 1915).  on, eas. sixt of livest of west of west of west of west of livest of li
F3, 00000>: 096   26   71   70   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.05   15.			185 40	195.55 105.65 5.530	185.40 195.55 105.65	5 5.30	ka, Okla., to neches (1915). Siston, east of Tiston, east of Tiston, west of Mex., west of the Fe, N. Mex. Mex. N. Mex. N. Mex.
F3, 00000>:   69   26   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   69   60   71   70   69   69   69   69   69   69   69   6	185 40 175 55 184 95 5 30	125.40 175.55 164.95 5.30	18 4	195.55 105.65 5 5.30	185.40 195.55 105.65	6 5.30	Naymoka, Okla., to ng branches (1915). Grande division, east of le division, east of le N. Mex., west of Demine, N. Mex. to of Demine, N. Mex. to, N. Mex. ming, N. Mex. ming, N. Mex.
F3, 00000>:   69   26   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   71   70   69   60   70   70   69   69   60   71   70   69   69   69   69   69   69   69   6	175, 40 175, 55 184, 95 5, 30	125.40 175.55 174.95 5.30	138	195.55 105.65 5.5.30	165.40 115.55 115.65	6 5.30	ca, Okla.; Waynoka, Okla., to la., including branches (1915).  Mex.; Rio Grande division, east of I Rio Grande division, east of I. His of Grande division, east of I. Lamy to Santa Fe, N. Mex.; Lamy to Santa Fe, N. Mex. Albuquerque, N. Mex.  Albuquerque, N. Mex.  cast of Deming, N. Mex.  T. Mex.; Las Vegas, N. Mex., the C. Mex.; and Rio Grand.
F3, 00000>: 08   26   71   70   08   15.05   09   06   71   70   09   06   71   70   09   06   71   70   09   00   00   00   00   00   00	155.40 155.55 184.95 5.30	15.55 16.95 16.95 16.95		195.65 195.65 5.30	185.40 195.55	6 5.30	o Waynoka, Okla.; Waynoka, Okla., to ynoka, Okla., to ynoka, Okla., including branches (1915).  Vegas, N. Mex.; Rio Grande division, east of Mex.; and Rio Grande division, east of Mex., to Albuquerque, N. Mex., west of arstow, Cal.  Ogrande division, east of Demine, N. Mex., N. Mex., Lamy to Santa Fe, N. Mex.  Anx., I. Jamy to Santa Fe, N. Mex.  Anx., to Albuquerque, N. Mex.  Anx., to Albuquerque, N. Mex.  Anx., Ariz.  dedivision east of Deming, N. Mex.  N. Mex.  Mex.  Mex.  O Raton, N. Mex.; Las Vegas, N. Mex., t  Mex., to Belen, N. Mex., and Rio Grann, N. Mex., t  Mex., to Mex., to Belen, N. Mex., and Rio Grann, N. Mex., to Mex.
F3, 00000>:   26   26   71   70	155.40 155.55 184.95 5.530	15.540 15.55 184.95 8.530		185,55 185,65 185,65 185,65		6 5.30	cans, to Waynoka, Okla.; Waynoka, Okla., to Waynoka, Okla., to Moxy.; Okla.; Waynoka, Okla., meudding branches (1915).  Mox.; coal runs.  o Las Vegas, N. Mex.; Rio Grande division, east of gass, N. Mex., and Rio Grande division, east of gas. N. Mex., to Albuquerque, N. Mex., west of ho is Barstow, Cal.  nd Rio Grande division, east of Deming, N. Mex. to Regas, N. Mex.; Lamy to Santa Fe, N. Mex. Grande division east of Deming, N. Mex.  Grande division east of Deming, N. Mex.  Grande division east of Deming, N. Mex.  Grande division east of Deming, N. Mex.  Grande division east of Deming, N. Mex.  Grande, N. Mex.  Olo., 10 Raton, N. Mex.; Las Vegas, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. Mex., t Vess, N. M
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F3, 00000>:	71 70 15.05	1 5.20 2 5.05 125.40 13.55 14.95 8.5.30		105.65 105.65 5.30		\$ 5.30	i. Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Ington, Kans., to Waynoka, Okla., including branches (1915).  and Hebron, N. Mex., coal runs.  and Hebron, N. Mex., toal runs.  stor, I. Okaynoka, i. Mex.; Rio Grande division, east of S.; Clovis to Belen, N. Mex., and Rio Grande division, east of Sions, lines south of Barstow, Cal.  satersfeld, Cal.  sate of Deming, and Rio Grande division, east of Deming, N. Mex., Law Vegas, N. Mex., Law Vegas, N. Mex., to Albuquerque, N. Mex.  i. Mex., Law Vegas, N. Mex., to Albuquerque, N. Mex.  illines south of Ashfork, Ariz.  Nex., and Rio Grande division east of Deming, N. Mex.  in., Lamy to Santa Fe, N. Mex.  in., Lamy to Santa Fe, N. Mex.  i. Mex., Io Santa Fe, N. Mex.  i. Mex., Io Santa Fe, N. Mex., to Albuduerque, N. Mex.  i. Mex., io Santa Fe, N. Mex.  i. Mex., Io Santa Fe, N. Mex.  i. Mex., Korsky, S. Mex., to Delen, N. Mex., to Grande, in Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa F
FB3, 00000>:  olimitation of the pounds on drivers.  Do. Do. Do. Do. Do. Do. Do. Do. Do. D	26 71 70 566 71 70 15.05	15.20 25.05	15.10	18,555 18,555 18,555 18,555 18,555	15.30	\$ 55.30	Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Wellington, Kans., to Waynoka, Okla., including branches (1915). ung and 4lebron, N. Mex., coal runs; Raton, N. Mex., to Las Vegas, N. Mex.; Rio Grande division, east of Mex.; Clovis to Belen, N. Mex., and Rio Grande division, east of July. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., west of divisions, lines south of Barstow, Cal.  1. west of Deming, and Rio Grande division, east of Deming, N. Mex.; Colo.; Raton to Las Vegas, N. Mex.; Lamy to Santa Fe, N. Mex., in N. Mex., and Rio Grande division east of Deming, N. Mex. and lines south of Ashfork, Ariz.  10. N. Mex., and Rio Grande division east of Deming, N. Mex., and lines south of Ashfork, N. Mex.  1. Colo.; Lamy to Santa Fe, N. Mex.  1. Colo.; Lamy to Santa Fe, N. Mex.  1. Colo.; La Junta, Colo., 10 Raton, N. Mex.; Las Vegas, N. Mex., to Colo.; La Junta, Colo., 10 Raton, N. Mex., to Belen, N. Mex., and Rio Grande, Vegas, N. Mex.; Destander, N. Mex.; Osbar, N. Mex., to Belen, N. Mex., and Rio Grande, Colo., and west of Deming, N. Mex., to Genne, N. Mex.; and Rio Grande, Colo., and west of Deming, N. Mex.
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ATCHISON, TOPEKA & SANTA FE RY .-- Continued.

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<sup>1</sup> Chicago to Canon City, Colo.; Wellington, Kans, to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1914).

Chicago to Canon City, Colo.; Wellington, Kans, to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1914). Waynoka, Okla., to Pecos, Tex.

1 Los Angeles and Valley divisions, lines south of Barstow, Cal.

<sup>6</sup>Clovis, N. Mex., to Belen, N. Mex., and Rio Grande division east of Deming, N. Mex.
<sup>6</sup> Pueblo, Colo., to Denver, Colo., Raton, N. Mex., to Las Vegas, N. Mex.

West to Deming, N. Mex., to Santa Fe, N. Mex.

§ Santa Fe district, Lamy, N. Mex., to Santa Fe, N. Mex., to Albuquerque, N. Mex.

§ La Junia, Colo., to Ration, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., west of Deming, N. Mex., to Las Vegas, N. Mex., to Albuquerque, N. Mex., to Las Vegas, N. Mex., to Belen, N. Mex., and Rio Grande division east of Deming, N. Mex., and west of Deming, N. Mex., to Invente Colo., to Deming, N. Mex., to Reton, N. Mex., to Albuquerque, N. Mex., to Bakersfield, Cal.

14 West of Winslow, Ariz, and lines south of Ashfork, Ariz. Is Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs.

ATCHISON, TOPEKA & SANTA FE RY .- Continued.

Class.  FOUR-CYLINDER COM- POUND LOCOMOGIVES—		22	Average weight on on drivers (tons).	1914	4 1915	ncrea nt. I	s per d	day of 1	Mon 1915 A	per day of 100 miles or less or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 hounders or 10 h	r 10 hours	2 or les	1915	Valley.  Incre Amount.	Rate per day of 100 miles or less or 10 hours or less to engineers in specified territories.  See Hountain. Valley.  See Hountain. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per cent. Per c	1914	es.	Deser	t. Increase. unt. Per cent.
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Los Angeles and Valley divisions, lines south of Barstow. Cal.

\* Albuquerque, N. Mex., to Bakersfield, Cal.

Raton, N. Mex., to Las Vegas, N. Mex.; Clovis, N. Mex., to Belen, N. Mex.; and Rio Grande division east of Deming, N. Mex.

Puebló, Colo., tó Denver, Colo., and west of Deming, N. Mex.
 La Junta, Colo., tó Raton, N. Mex.; Las Vegas, N. Mex., to Abhaquerque, N. Mex.
 Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1914).
 Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.; Including branches (1915).

Waynoka, Okla., to Peros, Tex.

Starkville, Colo., 19 Bussburg and Hebron, N. Mex., coal runs.
Starkville, Colo., 19 Bussburg and Hebron, N. Mex., to Albuquerque, N. Mex.

Pueblo, Colo., to Denver, Colo.; Raton, N. Mex., to Las Vegas, N. Mex., to Albuquerque, N. Mex., west of Deming, N. Mex.,

H. La Junia, Colo., to Prany, N. Mex., to Santa Fe, N. Mex.

Pueblo, Colo, to Denver, Colo.; Raton, N. Mex., to Albuquerque, N. Mex., to Albuquerque, N. Mex., and west of Deming, N. Mex.,

Pueblo, Colo, to Denver, Colo.; La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., and west of Deming, N. Mex.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

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1 Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla.

2 Chicago to Canon City, Colo.; Wellington, Kans., to Waynoka, Okla., waynoka, Okla., to Pecos, Tex.; Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs (1914).

2 Waynoka, Okla., to Pecos, Tex.

3 Waynoka, Okla., to Pecos, Tex.

4 Starkville, Colo.; Blossburg and Hebron, N. Mex., coal runs.

6 Clovis, N. Mex., to Belen, N. Mex., and Rio Grande division east of Deming, N. Mex.

6 Clovis, N. Mex., to Belen, N. Mex., and Rio Grande division east of Deming, N. Mex.

7 Raton and Las Vegas, N. Mex.; west of Deming, N. Mex.

8 West to Demive, N. Mex., Las Vegas, N. Mex., to Albuquerque, N. Mex.

9 Las Junia, Colo., to Raton, N. Mex., Las Vegas, N. Mex., coal.

9 Los Angeles and Yalley divisions, lines south of Barstow, Cal.

u Albuquerque, N. Mex., to Bakersfield, Cal.

# ATCHISON, TOPEKA & SANTA FE RY.-continued.

		Increase.	. Per cent.													0 0 1		
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		h Ç	CIGI															
tories			1914									-		:				11 3.20
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s or les			1914			-						-						9\$3.00
or 10 hour		ase.	Per cent.				0.0	0.0			0.0	0.0					0 0	1 1 4
iles or less	Mountain.	Increase.	Amount.				\$0.00	8.			00.	8.						
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day of			1914			i	\$3.50	33.40		:	2 3.65	3.55	200			7 3.00	2.89	3.10
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-mn <sub>N</sub>	per.		914 19			21 2	: :	:	: :	:		:		92 70	AL.	::		
	S			SINGLE-EXPANSION LOCO- MOTIVES.	Class B3, 0000>:				D0.	Coal burners			.<000		Less than 135,000 pounds on driv-		Do	Do

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135,000 pounds and over on drivers.	D0 D0 D0	Coal burners— Less (han 135,000 pounds on driv- ers. Do.	00000 DD0	185,000 pounds and over on drivers.	Do. Do.	Oil burners- Less than 170,000 pounds on driv-	ers. Do Do Do

1Chicago to Canon City, Colo.; Wellington, Kans., to Pecos, Tex., including branches.

\*Puchlo, Colo., to Darver, Colo.; La Junta, Colo., to Raton, N. Wex., 1982 vegas. N. Mex., to Albuquerque, N. Mex., and Canta, Colo., to Law, and Canta, Colo., to May Vegas, N. Mex., and Counth of Albuquerque, N. Mex., to Law Vegas, N. Mex., and Counth of Albuquerque, N. Mex. (1914); Raton, N. Mex., to Law Vegas, N. Mex., and Counth of Albuquerque, N. Mex. (1914); Raton, N. Mex., to Law Vegas, N. Mex., and Counth of Albuquerque, N. Mex. (1914); Raton, N. Mex., to Law Vegas, N. Mex., and Counth of Albuquerque, N. Mex. (1914); Raton, N. Mex., to Law Vegas, N. Mex., south of Albuquerque, N. Mex.; Clovis to Belen, and the Country of May Vegas, N. Mex., and Country of May Vegas, N. Mex., and Country of May Vegas, N. Mex., and Country of May Vegas, N. Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., and Country of Mex., N. Mex.

\* Santa Fe district; Lamy, N. Mex., to Santa Fe, N. Mex.

• Starkville, Colo.; Blossburg and Hebron coal runs.
• Starkville, Colo.; Blossburg and Hebron, N. Mex., to Waynoka, Okla.; Waynoka, Okla., to Pecos, Tex.; Starkville, Colo., Blossburg and Hebron, N. Mex., coal runs, Pueblog, Colo., 10. Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.
• La Junta, Colo., to Raton, N. Mex.: Las Vegas, N. Mex., to Albuquerque, N. Mex.
• La Junta, Colo., to Raton, N. Mex.: Las Vegas, N. Mex., to Albuquerque, N. Mex.
• La Junta, Colo., to Raton, N. Mex.: Las Vegas, N. Mex., to Albuquerque, N. Mex.
• La Junta, Colo., to Raton, N. Mex.: Las Vegas, N. Mex., to Albuquerque, N. Mex.
• La Mex. To Rakeersled, Cal.
• Next. of N. Mex.: Las Vegas, N. Mex. Ariz.

# ATCHISON, TOPEKA & SANTA FE RY .- Continued.

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	or 10 hour		ase.	Per cent.				0.0
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		Class.			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Coal burners— Less than 170,000 p o u n d s on drivers Do Do Do Do	170,000 to 215,000 p o u n d s. on drivers. Do Do Do	Class B5, 000000> 2 (oil) 2 Less than 250,000 pounds on drivers

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250,000 pounds and over on drivers	Coal  Oil burners.  Do  Do  Do  Do  Do  Do  Do  Do  Do  D	Do. Coal burners. Do. Do. Do.	Class C3, O O O oo >:  Class C3, O O O oo >:  Coal	Oil burners— Less than 100,000 p o u n d s on drivers Do	DO 000	Do. Do.
Class			Class			

Chicago to Canon City, Colo.; Wellington, Kans., to Pecos, Tex., including branches.

Pueblo, Colo., to Denver, Colo.
La Junta, Colo., to Raton, N. Max.; Las Vegas, N. Mex., to Albuquerque, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex.; Clovis to Belen, Raton, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex. (1914); Raton, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex.

• Los Angeles and Valley divisions, lines south of Barstow, Cal.

• Abuquerque, N. Mex., to Bakersineld, Cal.

Theblob Colo., to Denver, Colo.; La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex., to Abuquerque, N. Mex., to Abuquerque, N. Mex., to Abuquerque, N. Mex., to All terrifories Atchison, Topeka & Santa Fe Ry. and Panhandle and Santa Fe Ry.

Pall terrifories Atchison, Topeka & Santa Fe Ry. and Panhandle and Santa Fe Ry.

Pueblo, Colo., to Bostow, Colo.: Lamy, N. Mex., to Santa Fe, New Mex., to Abuquerque, and south of Abuquerque, N. Mex., to Belen, N. Mex., to Abuquerque, and south of Abuquerque, N. Mex., to Belen, N. Mex., to Bakton, N. Mex., to Las Vegas, N. Mex.

\*\*Raton, N. Mex., to Las Vegas, N. Mex.

ATCHISON, TOPEKA & SANTA FE RY.-Continued.

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8 Los Angeles and Valley divisions, lines south of Barstow, Cal.

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### ATCHISON, TOPEKA & SANTA FE RY.--Continued

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Starkville, Colo.; Blossburg and Hebron coal runs.

\*Los Angeles and Valley divisions, lines south of Barstow, Cal.
\*Pueblo, Colo., to Darver, Colo., to Annat, Colo., to Anual, Colo., to Anual, Colo., to Anual, Colo., to Anual, Colo., to Anual, Colo., to Anual, Colo., to Anual, Colo.
\*Radon, N. Mex., to Las Vegas, N. Mex., and south of Albuqueque, N. Mex. (1944); Radon, N. Mex., to Las Vegas, N. Mex., south of Albuqueque, N. Mex., Clovis to Belen,

Santa Fe district; Lamy, N. Mex., to Santa Fe, N. Mex.

Albuquerque, N. Mex., to Bakersfield, Cal.

Public, Colo., to Denver, Colo.

P. La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. Mex., to Albuquerque, N. Mex.

P. La Junta, Colo., to Raton, N. Mex.; Las Vegas, N. and Panhandle and Santa Fe Ry.

# ATCHISON, TOPEKA & SANTA FE RY.-Continued.

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1Chicago to Canon City, Colo.; Wellington, Kans., to Pecos, Tex., including branches.

\*Starkfulle, Colo.; Blossburg and Hebron color runs.

\*Pureblo, Colo.; Denryer, Colo.; La Junta, Colo.; to Raton, N. Mex.; Las Vegas, N. Mex., to Las Vegas, N. Mex., south o falbuquerque, N. Mex.; Clovis to Belen,

\*Raton, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex. (1914); Raton, N. Mex., to Las Vegas, N. Mex., south o falbuquerque, N. Mex.; Clovis to Belen,

Therefore, Color, N. Mex., to Santa Fe, N. Mex., to Santa Fe, N. Mex., to Santa Fe district; Lamy, N. Mex., to Santa Fe, N. Mex., to Waynoka, Okla., to Pecos, Tex.; Starkville, Colo., Blossburg and Hebron, N. Mex., to Chicago to Canon City, Colo.; Raton, N. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex., to Raton, N. Mex., Las Vegas, N. Mex., to Albuquerque, N. Mex., to Raton, N. Mex., Las Vegas, N. Mex, to Albuquerque, N. Mex.

\*\*Balanta Colo., to Raton, N. Mex., to Barstow, Cal.\*\*

\*\*Balanta Colo., to Raton, N. Mex., to Barstow, Cal.\*\*

\*\*Balanta Colo., to Colo., to Denver, Colo.\*\*

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ATCHISON, TOPEKA & SANTA FE RY.--Continued.

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Rate per day of 100 miles or less or 10 hours or less to firemen in specified territories.		Increase.	Amount. Per cent.		0.0
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			1914		9\$3.75 9 3.75
Average weight	drivers (tons).		5 1914 1915 1914		9\$3.75 9 3.75
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	Class.			FOUR-CYLINDER COM- POUND LOCOMOTIVES— continued.  Class B4, OOOOOo>—Con. Coal burners— Coal burners— Coal burners— Do. Do. Do. Do. Do. Do. Do. Do. Do. Do.	Less than 250,000 pounds on drivers. 250,000 pounds and over on drivers.

18.50 28.50 18.3.40 19.2.40	43.10	43.65 23.65 12.55 12.95	8.66 8.365 13.35 13.35 13.35 13.33	1 Chicago to Canon City, Colo.; Wellington, Kans., to Pecos, Tex., including branches.  2 Pueblo, Colo., to Deprey; Cloi., LaJ untla, Colo., to Raton, N. Mex., LaS Vegas, N. Mex., to Albuquerque, N. Mex.  8 Ration, N. Mex. to Last Vegas, N. Mex. and control of Albuquerque N. Mex. to Last Vegas, N. Mex. south of Albuquerque N. Mex. Choristo Ralen N. Mex.
Coll burners—  Less than 135,000  Do Do Do Do Do Do Do Do Do Do Do Do Do D	<u>s</u> a	Coal burners— Less than 135,000 pounds on drivers ers D D D D D D D D D D D D D D D D D D D	135,000 pounds and over on directs by the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the prop	<ul> <li>Chicago to Canon City, Colo.: Wellington, Kans., to Pecos, Tex., inclus Predo, Colo., to Denver, Colo., La Unita, Colo., to Raton, N. Mox.: B Ration, N. Mex.: O. Los N. Wex. and control of the North Programmer of Mex.</li> </ul>

Abbuquerque, N. Mex., to Bakersfield, (al.
 West of Winstow and lines south of Ash Fork, Ariz.
 Pueblo, Colo., to Benver, Colo.
 La Junta, Colo., to Raton, N. Mex., Las Vegas, N. Mex., to Albuquerque, N. Mex. and It erritories Arthison, Topeka & Santa Fe Ry. and Panhandle and Santa Fe Ry. in Starkville, (colo., Blossburg and Hebron coal runs.
 Banta Fe district, Lamy, N. Mex., to Santa Fe, N. Mex.

# ATCHISON, TOPEKA & SANTA FE RY.-Continued.

Average Rate per day of 100 miles or less or 10 hours or less to firemen in specified territories.  Num-veight veight ber. drivers Plains. Mountain. Valley. Desert.	Increase. Increase. Increase.	Amount. Per cent. Per cent. Per cent. Amount. Per cent. 1914 Amount. Per cent.	183.15 283.50 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 28	Class.  FOUR-CYLINDER COMPONENT ES— CONTINUED. Class E3, 00000>—con. Oil burners— Less than 170,000 Do no drivers. Do Do Do Do Do Do Do Do Do Do Do Do Do D	Num- ber.	Average weigh on driven (tons)	A verage weight on drivers (tons).		Plain	8g   A	1914	M M M M M M M M M M M M M M M M M M M	iountain.  Incr Amount.	ease. Per cent.	1914 1915 883.10	1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 1915 - 19	Valley.  Incr Amount.	Per cent.	1914	1915 683.50	Desert. Inc Amount	Desert.  Increase.  Amount. Per cent.
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	RAILRUAD	LABUR	ARBITR	ATION	i 5.	
		0.0	6.3	6.3	6.3	6.3
		\$0.00	. 25	.25	.25	. 25
3.65	3.65	3.75	8 4.25	8 4.25	8 4.25	8 4.25
1 1 1 1		833.75	4.00	8 4.00	4.00	4.00
		1.3	6.3	6.3	6.3	6.3
		\$0.00	. 25	. 25	. 25	6 Albacanorana N. May to Bebersfield Col
23.25	23.25	8 3.75	8 4.25	8 4.25	8 4.25	8 4.25
		8 3.75	8 4.00	8 4.00	8 4.00	8 4.00
		0.0	6.3	6.3	6.3	6.3
		\$0.00	.25	. 25	. 25	.25 Mariente
23.65 43.65 50.05	23. 65 6 3.65 73. 80 43. 85	3.75	3 4.25	8 4.25	8 4.25	8 4.25
		83.75	8 4.00	8 4.00	8 4.00	8 4.00
		0.0	6.3	6.3	6.3	6.3
		\$0.00	. 25	. 25	. 25	8 4.00 8 4.25 25 6.3 8 4.00 8 4.25
13.30	29. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	8 3.75	4.25	8 4.25	3 4.25	8 4.25
		83.75	4.00	8 4.00 E	4.00	4.00
	117		152		8 8	
: : : : :	117		157			
	91		38	2	: =	
	91		65		: -	
Cos lburners— Less than 170,000 pounds on drivers. Do. Do. Do. TO,000 pounds and less than 215,000 pounds on drivers.	drivers  D0.  D0.  D0.  D0.  D0.  Class E5, 0000000>:  Çoal.	Less than 260,000 Dounds on drivers 256,000 pounds and over on drivers Class E6,000-0000> (Mallet):	Class Bs, OOOOOOOOOOOO	Class E8, 00000-	275,000 pounds and over on drivers.  Class Ello, o U U U U U U U U U U U U U U U U U U	275,000 pounds and over on drivers

1 Chicago to Canon City, Colo.; Wellington, Kans., to Pecos, Tex., including branches. Albuquerque, N. Mex., to Bakersfield, Cal. Los Angeles and Valley divisions, lines south of Barstow, Cal. Pecos, Tex., including branches. Albuquerque, N. Mex., to Darver, Colo.; La Junta, Colo., to Raton, N. Mex., Las Vegas, N. Mex., to Albuquerque, N. Mex., to Albuquerque, N. Mex., and south of Albuquerque, N. Mex., cloris to Belen, A. Mex., to Las Vegas, N. Mex., and south of Albuquerque, N. Mex., cloris to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex.; Clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., clovis to Las Vegas, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., clovis to Belen, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., south of Albuquerque, N. Mex., sout

# BALTIMORE & OHIO CHICAGO TERMINAL R. R.

37111	1 1 1114	.010.	L	OH	10 01	IIOAC	10 11		AL R. R	•		
	Ni be	ım- er.	wei	ver- ge ight	Rate mi less	per les or s to—	day o	of 100 ars or	Increas engine		Increas fireme	
Class.			dri (to	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.												
Class A2, 00>	13	4 	38	38	\$4. 25	\$4. 25	<b>\$2.</b> 50	\$2.70	\$0.00	0.0	\$0, 20	8, 0
SwitchingClass B3, OOOo>	16	16	66	82	4, 25	4. 25	2. 50	2.70	.00	.0	. 20	8.0
Switching. Class B4, OOOOo>	6	···6	84	84	4. 25	4. 40	2.50	2.70	.15	3.5	. 20	8, 0
SwitchingClass C2, OOoo>	2		28	29	4. 50	4. 75	2.75	3.00	. 25	5. 6	, 25	9.1
Passenger Class E4. 000000>	4	4	60	60	4.15	4.30	2.40	2, 50	.15	3.6	.10	4, 2
SwitchingClass 12, 000 000>	····	<sub>1</sub>	30	30	4. 25	4. 25	2, 50	2.70	. 00.	. 0	, 20	8.0
Switching					4, 25	4, 25	2, 50	2.70	.00	.0	. 20	8.0
I	BEA	UM(	rno	' &	GREA	T NO	рктн	ERN	R R.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class C3, OOOoo> Freight		2	40	40	\$4.95	<b>\$4.</b> 95	\$3.10	\$3.10	\$0.00	0.0	\$0,00	0.0
	В	ELI	IN(	ЭHА	M &	NOR'	HER	N R.	R.			
SINGLE-EXPANSION LOCOMOTIVES.												
Class B3, OOOo>	1 	1	34	34	\$4.15	\$4.30	<b>\$2.4</b> 5	<b>\$2.</b> 50	\$0.15	3, 6	\$0.05	2.0
Switching Freight					3.50 4.50	4. 25 4. 85	2. 25 2. 85	2. 70 2. 85	.75 .35	21. 4 7. 8	. 45	20. 0
Class C2, OOoo> Passenger	1	1	28	28	4, 15	4.30	2. 45	2, 50	.15	3.6	.05	2.0
Class C3, OOOoo> Freight	3		58	52	4.50	4. 85	2. 85	2. 85	.35	7.8	.00	
	I	BEL!	r R	AIL	WAY		F CH	ICAGO	). ).			
		1										
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO> Switching— Transfer—	68	68	62	62								•••••
80,000 pounds and less than 1 0 0 , 0 0 0					<b>\$4. 4</b> 0	\$4. 75	\$2. 75	<b>\$2.</b> 95	<b>\$0.</b> 35	8, 0	\$(1, 20	7.3
pounds 100,000 pounds and less than 1 4 0 , 0 0 0												
and less than 1 4 0 , 0 0 0 pounds 140,000 pounds and less than				• • • •	4, 40	4. 75	2.75	3.15	.35	8.0	.40	14. 5
1 7 0 , 0 0 0 pounds					4. 40	4. 75	2.75	3.15	.35	8.0	.40	14.5

Rates paid to locomotive engineers and firemen before and after the arbitration of 1915, and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued.

#### BELT RAILWAY CO. OF CHICAGO-Continued.

В	SLT	RA	ILW	AY	CO. (	OF CE	HICAG	₹O—Co	ntinued.			
Olean		ım- er.	wei o	er- ge ight on	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increas fireme	
Class.			(to	ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class A3,000>—Contd. Yard— 80,000 pounds and less than 1 0 0 , 0 0 0												
pounds 100,000 pounds and less than 1 4 0 , 0 0 0 pounds		••••	••••		\$4, 25	\$4. 25	\$2, 50	\$2.70	\$0.00	0.0	\$0.20	8, 0
140,000 pounds and less than		••••	••••	••••	4. 25	4. 25	2. 50	2. 70	.00	.0	. 20	8, 0
pounds Class A4, OOOO> Switching— Transfer— 200,000 and less than 250,000	25	25	102	102	4. 25	4. 40	2, 50	2.75	.15	3.5	. 25	10.0
Class B4, OOOOo> Switching— 140.000 and less	4	4	83	83	4, 50	4. 75	3.10	3.15	. 25	5. 6	.05	1.6
t'h a n 170,000 pounds Class C2, O O o o Switching Less than 80,000	···i	1	30	30	4. 50	4. 75	3, 10	3, 15	. 25	5, 6	. 05	1, 6
Less than 80,000 pounds on drivers				••••	4, 50	4. 75	3.10	3.15	. 25	5.6	. 05	1, 6
			CH	ICA	GO &	ALTO	N R.	R.				
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> Switching— First-class yards	3	2	36	37	*4.07	\$4, 25	\$2, 50	eo 70	\$0.00		***********	8, 0
Second-class yards Class A3, 000> Switching—	55	51	66	68	\$4, 25 4, 00	4. 25	2. 40	\$2.70 2.70	. 25	0.0 6.3	<b>\$0.</b> 20 . 30	12.5
First-class yards Second-class yards	68	68	70	70	4. 25 4. 00	<b>4.</b> 40 <b>4.</b> 40	2. 50 2. 40	2.75 2.75	.15 .40	3.5 10.0	. 25 . 35	10. 0 14. 6
Class B3, OOOo>					4, 40 4, 95	5. 10	2, 65 3, 20	3. 20	.15	3.0	.00	.0
First-class yards Second-class yards. Class B4, 00000>		54	91	91	4. 25 4. 00	4. 40 4. 40	2. 50 2. 40	2. 75 2. 75	.15 .40	3.5 10.0	. 25	10. 0 14. 6
Switching— First-class yards					5. 15 4. 25	5. 30 4. 40	3. 25 2. 50	3. 45 2. 75	.15	2.9	. 20	6. 2
Second-class yards. Class C2, OOoo>  Passenger— Less than 80,000	45	33	35	38	4.00	4.40	2. 40	2. 75	.40	10.0	.35	14.6
pounds on drivers 100,000 and less than 140,000	••••	••••	••••		4, 15	4, 30	2. 40	2, 50	.15	3, 6	.10	4. 2
pounds on drivers Freight					4.15 4.90	4, 40	2. 40 2. 87	2, 65 2, 87	. 25	6.0	. 25	10.4

CHICAGO & ALTON R. R.-Continued.

Class.		ım- er.	wei	er- ge ight n	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo> Passenger Freight Switching—		24	61	61	\$4.40 4.95	\$4, 40 4, 95	\$2.65 3.20	\$2, 65 3, 20	\$0.00 .00	0.0	\$0.00	0.0
First-class yards Second-class yards Class E4. 000000>	50	50	107	107	4. 25 4. 00	4. 40 4. 40	2.50 2.40	2. 75 2. 75	.15	3.5 10.0	. 25 . 35	10. 0 14. 6
Freight. Class F2, 00000> Passenger Freight		9	49	49	5. 30 4. 40 4. 95	5. 45 4. 40	3. 75 2. 65 3. 20	3. 75 2. 65	.15	2.8	.00	0.
Class F3, oOOOoo> Passenger— 170,000 and less than	. 35	35	78	78	1, 50		3, 20					
200,000 pounds on drivers 200,000 and less than 250,000 pounds on	-				4.40	4. 40	2.65	2.70	.00	.0	.05	1.9
driversFreight.					4.40 4.95	4. 45	2. 65 3. 20	2, 85	.05	1,1	.20	7.5
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class E6, oOOOOOOo> (Mallet)Freight	. 2	2	142	143	6.05	6. 50	4.00	4. 25	.45	7.4	.25	6.3

## CHICAGO & NORTH WESTERN RY.

		1			1	1		1	1	1		
SINGLE-EXPANSION LOCO-												
Class A3, 000>												
Oil	7	7	47	47								
Coal	290	290	58	58								
Switching-	1		1									
First-class yards					\$4. 25	\$4.40	\$2.50	\$2.75	\$0, 15	3.5	\$0, 25	10.0
Second-class yards.						4. 25	2.40	2.70	. 25	6.3	. 30	12.5
Deadwood						4.70		2, 80				
Class B3, 0000>	16	16	51	51								
Passenger					4, 50		2.80					
Freight—			1									
86,000 pounds on	]											
drivers		1			4.95	4.95	3, 10	3, 10	.00	.0	.00	.0
44,500 pounds on				••••	21 30	2000	0.10	0.10			.00	
drivers, narrow												
					4.60	4.60	2.80	2, 80	.00	.0	.00	.0
Way freight					5. 25	5. 25	3. 35	3.40	.00	.0	.05	1.5
Class B4, OOOOo>	251	251	105	105	3. 23	0. 20	0.00	0.40	.00	.0	.05	1.0
					5.40	5. 45	3. 75	3. 75	. 05	. 9	.00	.0
Freight					0.40	5. 75		4. 05	.05	.9	.00	.0
Way freight						9. 79		4.00				
Class C2, OOoo>	42	42	20	20								
Oil		225	30 32	30 33		• • • • • •						
	249	225	32	55					********			
Oil—								1				
Passenger—	]	1										
19 by 24 inch	1	1				4 40	0.05	0.05			00	
cylinders				• • • •	4.40	4.40	2.65	2.65	.00	.0	.00	.0
18 by 24 inch					4 46		0.05	0.05			60	
cylinders		• • • •		• • • •	4.40	4.40	2.65	2.65	.00	.0	.00	.0
17 by 24 inch									10			
cylinders					4. 20	4.30	2.65	2.65	.10	2.4	.00	.0

## CHICAGO & NORTH WESTERN RY .- Continued.

		ım- ər.	wei 0	er- ge ight	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increas fireme	
Class.			dri	rers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO-												
Class C2, O Ooo >—Contd. Oil—Continued. Freight— 17 by 24 inch												
cylinders 18 by 24 inch					\$4.60	\$4.75	\$2.70	\$2.75	\$0.15	3.3	\$0.05	1.9
cylinders					4.60	4. 75	2.75	2. 75	.15	3.3	.00	.0
Way freight— Switching (sec- ond-class												
Coal— yards)			• • • •		4.00	4. 25	2.40	2.70	.25	6.3	. 30	12.5
Passenger— 19 by 24 inch					4.40	4.40	2. 65	2. 65	.00	.0	.00	.0
cylinders 18 by 24 inch cylinders					4.40	4.40	2. 65	2. 65	.00	.0	.00	.0
17 by 24 inch cylinders					4. 20	4. 30	2. 65	2. 65	.10	4.4	.00	.0
Freight— 17 by 24 inch												
cylinders 18 by 24 inch					4. 60	4. 75	2. 85	2.85	.15	3.3	.00	.0
cylinders Way freight—		••••			4. 60	4.75	2.90	2.90	.15	3. 3	.00	.0
17 by 24 inch cylinders					4.90	5. 05	3.10	3. 15	.15	3.1	. 05	1.6
18 by 24 inch cylinders					4.90	5. 05	3.15	3. 20	.15	3.1	. 05	1.6
Switching (second- class yards) Class C3, OOOoo>					4.00	4. 25	2.40	2.70	. 25	6.3	.30	12.5
OilCoal	63 642	63 636	56 58	56 58								
Oil—	O E S	000	00									
Passenger— 20 by 26 inch cylinders					4. 50	4. 50	3. 05	3. 05	.00	.0.	.00	.0
18 by 24 inch cylinders					4.50	4. 50	2. 80	2.80	.00	.0	.00	.0
Freight— 21 by 26 inch												
cylinders 18 by 26 inch			• • • •		5. 20	5. 20	3. 15	3. 15	.00	.0	.00	.0
cylinders 19 by 24 inch					4.95	4. 95	2. 95	2.95	.00	.0	.00	.0
cylinders 18 by 24 inch					4. 95	4. 95	2. 95	2.95	.00	.0	.00	.0
cylinders 20 by 26 inch cylinders				• • • •	4. 95 5. 05	4. 95	2. 95	2.95	.00	.0	.00	.0
Way freight— 18 by 26 inch					5.05	5.05	2.13	5. 15	.00	.0	.00	.0
cylinders 19 by 24 inch					5. 25	5. 25	3. 20	3. 25	.00	.0	. 05	1.6
cylinders 20 by 26 inch					5. 25	5. 25	3. 20	3. 25	.00	.0	. 05	1.6
cylinders Switching (second-					5. 35	5. 35	3.40	3. 45	.00	.0	. 05	1.5
class yards)					4. 25	4. 25	2. 50	2. 70	.00	.0	. 20	8.0
Passenger— 18 by 24 inch												
cylinders 19 by 24 inch			• • • •	• • • •	4.50	4. 50	2.80	2. 80	.00	.0	.00	.0
cylinders 18 by 26 inch			• • • •			4. 50		2.80				
cylinders 20 by 26 inch					4.50	4. 50	2 05	2.80				
cylinders	****	****	• • • •		4. 50	4.50	3.05	3. 05	.00	.0	.00	.0

## CHICAGO & NORTH WESTERN RY .- Continued.

With the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	Aver-					per	day (	of 100				
		ım- er.	wei	ight n		s to—	10 ho	urs or	Increas engine		Increas	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo>—Contd. Coal—Continued. Freight—												
18 by 24 inch cylinders 18 by 26 inch					<b>\$4.95</b>	<b>\$4.</b> 95	\$3.10	\$3. 10	\$0.00	0.0	\$0.00	0.0
cylinders					4. 95	4. 95	3. 10	3. 10	.00	.0	.00	.0
19 by 24 inch cylinders					4. 95	4. 95	3. 10	3. 10	.00	.0	.00	.0
20 by 26 inch cylinders 21 by 26 inch					5. 05	5. 05	3. 30	3. 30	.00	.0	.00	.0
way freight—					5. 20	5. 20	3.30	3. 30	.00	.0	.00	.0
18 by 24 inch cylinders 18 by 26 inch					5. 25	5. 25	3. 35	3.40	.00	.0	. 05	1.5
cylinders				••••	5. 25	5. 25	3. 35	3.40	.00	.0	. 05	1.5
cylinders 19 by 24 inch cylinders					5. 25	5. 25	3. 35	3.40	.00	.0	. 05	1.5
20 by 26 inch cylinders					5. 35	5. 35	3. 55	3. 60	.00	.0	. 05	1.4
21 by 26 inch cylinders					5, 50	5. 50	3. 55	3. 60	.00	.0	. 05	1.4
Switching— First-class yards					4. 25	4. 25	2, 50	2.70	.00	.0	. 20	8.0
Sec on d-class					4.00	4. 25	2.40	2. 70	. 25	6.3	.30	12. 5
yards Class C4, OOOOoo> (oil) Passenger	5	5	27	27	4. 95	4. 95	2.95	3. 10	.00	.0	.15	5. 1
Freight	35	60	114	114	4. 95	4. 95	2. 95	3. 10	.00	.0	.15	5. 1
Class E4, 000000>			114		5. 65	5. 65	3. 75	3.75	.00	.0	.00	.0
Class F2, oOOoo>:	6	6	46	46								
Coal Passenger		85	46	46	4.40	4.40	2.80	2.80	.00		.00	.0
Class F3, oOOOoo> Passenger—	139	154	73	73					• • • • • • • • • • • • • • • • • • • •	•••••		
23 by 28 inch cylin- ders					4. 65	4. 65	3. 10	3. 10	.00	.0	.00	.0
25 by 28 inch cylinders		- 1	į		4. 65	4. 65	3, 10	3. 10	.00	.0	.00	.0
22 by 26 inch cylinders		1			4. 50	4. 50	3. 05	3. 05	.00	. 0	.00	.0
Freight				• • • •	5. 20 5. 50	5. 20	3. 30 3. 55	3. 30	.00		.00	
СНІ	CAG	O A	ND	WE	STER	N IN	DIAN	A RA	ILROAD.			
SINGLE-EXPANSION LOCOMOTIVES.												
Class A3, 000>	7	7	71	75	\$4. 25	\$4.40	\$2,50	\$2, 75	\$0, 15	3, 5	\$0. 25	10.0

SINGLE-EXPANSION LOCOMOTIVES.													
Class A3, 000>	7	7	71	75									
Switching					\$4.25	\$4.40	\$2.50	\$2.75	\$0.15	3. 5	\$0. 25	1	10.0
Class A4, 0000>	5	5	107	107									
Work train					4.40	5. 45	2.70	3.70	1.05	23.9	1.00	3	37.0
Class B3, 000o>	12	12	78	78									
Switching					4. 25	4.40	2.50	2.75	. 15	3.5	. 25	1	10.0
Class E3,00000>	3	3	66	66									
Passenger					5. 27	5. 27	2.95	2.95	.00	.0	.00		.0

# CHICAGO, BURLINGTON & QUINCY R. R.

		ım- er.	wei	er- ge ight	Rate mi les	per les or s to—	day o	of 100 ars or	Increas engine		Increas	
Class.			dri (to	rers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES,												
Class A2, OO> Switching— First-class yards Second-class yards			30	30	\$4. 25 4. 00	\$4. 25 4. 25	\$2, 50 2, 40	\$2.70 2.70	\$0.00 .25	0. 0 6. 3	\$0.20 .30	8. 0 12. 5
Class A3, OOO> Oil	1			{58 58								
First-class yards Second-class yards.				75	4. 25 4. 00	4. 40 4. 25	2. 50 2. 40	2.75 2.70	. 15 . 25	3. 5 6. 3	. 25	10. 0 12. 5
Switching—				75	4. 25	4. 40	2. 50	2. 75 2. 75	. 15	0.5	0.	10.0
Second-class yards. Class B3, OOOo> Freight— H5 engine—	206	200	51	51	4. 00	4. 40	2. 40	2.75	. 40	10.0	.35	14.6
H5 engine— Through Local 91,500 and 106,-					4. 80 5. 10		2. 95 3. 20		********			
91,500 and 106,- 500 pounds on drivers— Through					W 00							
Local 111,500 and 121,500 pounds			••••		5. 00 5. 30	5. 00 5. 30	3. 15 3. 40	3. 15 3. 45	.00	.0	.00	. 0 1. 5
on drivers— Through					<b>5.</b> 15 5. 30	5. 15 5. 30	3. 30 3. 55	3. 30 3. 60	.00	.0	.00	.0 1.4
Class B4, 000000> Oil. Coal. Freight	110	11 103	90 86	86 86								
101,820 pounds on drivers, coal— Through Local					5. 00 5. 30	5. 00 5. 30	3. 15 3. 40	3. 15 3. 45	.00	.0	.00	.0
drivers, oil— Through					5. 00	5. 00	3. 00	3. 15	.00	.0	.15	5. 0
Local		••••			5. 30	5. 30 5. 15	3, 30	3. <b>45</b> 3. 30	.00	.0	.15	4.5
128,800 pounds on					5. 45	5. 45	3. 55	3. 60	.00	.0	.05	1. 4
drivers, oil— Through Local 164,400 to 179,200 pounds on driv-					5. 15 5. 45	5. 15 5. 45	3. 30 3. 55	3. 30 3. 55	.00	.0	.00	.0
pounds on driv- ers, coal— Through Local					5. 40 5. 70	5. 40 5. 70	3. 60 3. 85	3. 60 3. 90	.00	.0	.00	.0 1.3
ers, oil— Through					5. 40	5. 40	3. 60	3. 60	.00	.0	.00	.0
Class C2, OOoo> Passenger— 48,000 to 53,600	179	159	27	27	5. 70	5. 70	3. 85	3. 85	.00	. 0	.00	.0.
pounds on driv- ers			••••	••••	4. 15	4. 30	2. 40	2. 50	. 15	3.6	.10	4.2
drivers		••••	• • • •	••••	4. 40	4. 40	2.65	2.65	.00	.0	.00	.0

## CHICAGO, BURLINGTON & QUINCY R. R.—Continued.

CHICA	LING	TON	& Q ().	INCY	к. к.	-Continu	ea.					
	Nu be	ım-	wei o	er- ge ght	Rate mil less	per es or	day o	f 100 rs or	Increas engine		Increas fireme	e to n.
Class.			(to	vers	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per	Amount.	Per
										cent.		cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo>												
Oil Coal	5 121	$\frac{10}{112}$	59 53	54 54								
K6 engines, passenger Passenger, coal—					\$4. 15	• • • • • •	\$2.40	• • • • • •			•••••	
Passenger, coal— 90,200 to 100,700 pounds on driv-												
ers					4. 40	\$4.40	2, 75	\$2.75	\$0.00	0.0	<b>\$0.</b> 00	0.0
drivers					4. 40	4. 40	2.65	2, 65	.00	.0	.00	.0
121,400 to 141,700 pounds on					4 40	4 40	0.05	2, 95	.00	.0	.00	.0
drivers K7 engines					4. 40 4. 40	4. 40	2. 95 2. 75	2, 95	.00		.00	
Passenger, oil— 90,200 to 100,700												
drivers					4. 40	4. 40	2.75	2.75	.00	.0	.00	.0
87,000 pounds on drivers					4. 40	4. 40	2.65	2.65	.00	.0	.00	.0
drivers												
driversClass E3, 00000>	427	427	73	73	4. 40	4. 40	2, 95	2. 95	.00	.0	.00	.0
Freight, 110,270 pounds on drivers—	12,	121	10	10								
Through					5.00 5.30	5. 00 5. 30	3. 15 3. 40	3. 15 3. 45	.00	.0	.00	.0 1.5
Local					3. 30	- 5, 50	3.40	0.40	.00			1,0
pounds on drivers— Through					5.15	5. 15	3, 30	3.30	.00	.0	.00	.0 1.4
Local					5. 45	5. 45	3. 55	3.60	.00	.0	. 05	1.4
pounds on drivers— Through					5. 40	5. 40	3.60	3.60	.00	.0	.00	.0
Local. Class E4, 000000>	160	160	108	108	5.70	5, 70	3.85	3.90	.00	.0	. 05	1.3
Freight— 198,550 pounds on												
drivers— Through					5. 40	5. 40	3.75	3.75	.00	.0	.00	.0
Local					5. 70	5. 70	4.00	4. 05	.00	.0	. 05	1.3
drivers—					5. 65	5. 65	3.75	3.75	.00	.0	.00	.0
Through Local Class E5, 0000000>					5. 95	5. 95	4.00	4. 05	.00	.0	.05	1.3
Freight—	9	40	151	149								
301,800 pounds on drivers—								4 00	10	10	.00	.0
Through Local					5. 65	5. 75 6. 05	4. 00 4. 25	4. 00 4. 30	.10 .10	1.8 1.7	.05	1. 2
295,950 pounds on drivers—												
Through Local						5. 65		4. 00 4. 30				
Class F2, 00000>	. 27	27	46	47	4. 40	4. 40	2.95	2.95	.00	.0	.00	.0
Passenger Class F3, 000000> Passenger Class B3, 0000> (narrow gauge) Freight Class B4, 0000> (nar-	120	120	76	76	4. 60	4. 60	3. 05	3. 05	.00	.0	.00	
Class B3, 0000> (narrow	2	2	30	30								
FreightClass B4, 00000> (nar-					4.60	4.60	3.30	3.30	.00	.0	.00	.0
row gauge):		1		ſ40								
Oil Coal.	3	$\left\{ \begin{array}{l} 1 \\ 2 \end{array} \right.$	}40	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4 60	4.60	3 30	3 30	.00	0	.00	.0
Freight					1 4.00	4.00	0.00	0.00	, .00	,		

## CHICAGO, BURLINGTON & QUINCY R. R.-Continued.

Class.		ım- er.	wei o dri	ger- ge ght n vers	less	per les or s to—	10 hou	f 100 ers or men.	Increas engine	e to	Increas fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES.  Class E6, 00000000> Oil. Coal. Through freight. Local freight. Class F2, 0000> Passenger. Class E8, 000000000> Through freight. Local freight.	2 16 30	30		158 158 	\$6.40 6.40 4.40 6.40 6.40	\$6.50 6.50 4.40 6.50 6.50	\$4.00 4.25 2.95 4.00 4.25	\$4. 25 4. 25 2. 95 4. 25 4. 25	\$0.10 .10 .00	1. 6 1. 6 . 0	\$0. 25 .00 .00	6. 3 . 0 . 0
	(	CHIC	CAG	O G:		]		NR. I				
SINGLE-EXPANSION LOCO-MOTIVES.  Class A3, OOO> Switching—First-class yards. Second-class yards. Class A4, OOOO> Switching Class B3, OOOo> Passenger—Freight. Switching Class B4, OOOOo> Freight— 198,850 pounds on drivers. 198,850 pounds on drivers. 198,850 pounds on drivers (super-	24 11 29 47	24 11 28 47	60 89 44	59 90 44 97	\$4. 25 4. 25 4. 25 4. 50 4. 80 4. 25 5. 30	\$4. 40 4. 25 4. 40 4. 50 4. 80 4. 25 5. 30	2. 50 2. 50 2. 65 3. 05 2. 50 3. 75	\$3. 25 3. 10 3. 25 2. 65 3. 05 3. 10 3. 75	\$0.15 .00 .15 .00 .00 .00	3.5 .0 3.5 .0 .0 .0	\$0.75 .60 .75 .00 .00 .60	30. 0 24. 0 30, 0 .0 .0 24. 0
heated). Switching. Class C2, 0000> Passenger— Cylinders less than 18 inches Cylinders 18 inches and over. Freight. Class C3, 00000> Passenger Freight Switching. Class E3, 0000> Passenger Freight Switching.	26 37 74	25 37 73	63 69	63	5. 30 4. 25 4. 30 4. 40 4. 60 5. 05 4. 25 4. 50 5. 10	5. 30 4. 40 4. 30 4. 40 4. 75 4. 50 5. 05 4. 25 4. 50 5. 10	3. 25 2. 50 2. 45 2. 65 2. 85 2. 80 3. 25 2. 50 2. 80 3. 25	3. 45 3. 25 2. 50 2. 65 2. 85 3. 25 3. 10 2. 80 3. 25 3. 25	.00 .15 .00 .00 .15 .00 .00 .00	.0 3.5	. 20 . 75 . 05 . 00 . 00 . 00 . 60	6. 2 30. 0 2. 0 .0 .0 .0 24. 0
Switching— First-class yards Second-class yards Class E4, 000000> Freight. Class F3, 000000> Passenger  FOUR-CYLINDER COMPOUND LOCOMOTIVES. Class E6, 0000000> (Mallet). Freight— Through.	10	10 24	65	109 66 137	4. 25 4. 25 5. 55 4. 50	4. 40 4. 25 5. 55 4. 50	2. 50 2. 50 3. 50 2. 80	3. 25 3. 10 3. 70 2. 80	.00	3.5	.75 .60 .20 .00	30. 0 24. 0 5. 7

## CHICAGO JUNCTION RY.

	Number.						day o	of 100 irs or	Increas engine		Increas fireme	
Class.			(to	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO> Switching Class B4, OOOOo> Switching	56	58 1	66	66 109	\$4. 25	\$4, 40 4, 40	\$2.65		\$0.15		\$0.10	3.8
	СНІ	CAG	0, 1	MIL	WAUI	KEE 6	& ST.	PAUL	RY.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> Switching— First-class yards	52	48	32	32	\$4. 25.	\$4, 25	\$2,55	\$2.70	\$0.00	0.0	\$0.15	5.9
First-class yards Second-class yards. Class A3, OOO > Oil		13	57	60	4.00	4. 25	2.50	2.70	\$0.00 .25	6.3	. 20	8.0
Switching— First-class vards		226	59	60	4. 25	4. 40	2. 55 2. 50	2. 75	.15	3.5	. 20	7.8
Second-class yards. Class B3, OOOo> Oil	4	4	70	48	4.00	4. 25	2.50	2.70	. 25	6.3	. 20	8.0
Freight, oil burners— 55,800 pounds on	3	5	37	48							•••••	
drivers					4. 60 5. 00	4. 60 5. 00	2.75 2.95	2.75 2.95	.00	.0	.00	.0
139,000 pounds on drivers Freight, coal burners—					5. 20	5. 20	3. 10	3. 10	.00	.0	.00	.0
55,800 pounds on drivers 94,300 pounds on			• • • •		4.60	4.60	2.80	2.80	.00	.0	.00	.0
drivers					5. 00	5. 00 5. 20	3. 10 3. 25	3. 10 3. 25	.00	.0	.00	.0
Class B4, OOOOo> Oil	14 186	14 186	78 90	90 90								
Freight, oil burners— 156,400 pounds on drivers————————————————————————————————————					5.30	5. 30	3.15	3.15	.00	.0	.00	.0
186,500 pounds and over on drivers Freight, coal burners—					5.30	5.30	3.35	3.35	.00	.0	.00	.0
156,400 pounds on drivers 186,500 pounds and				• • • •	5.30	5.30	3.30	3.30	.00	.0	.00	.0
over on drivers Class C2, OOoo> Oil. Coal.		.	22 28	27 27	5.30	5.30	3.50	3.50	.00	.0	.00	
Oil burners— Passenger Freight.					4. 40	4. 40	2.50 2.65	2.50	.00	.0	.00	.0
Coal burners— Passenger Freight.		1			4. 60 4. 40 4. 60	4. 75 4. 40 4. 75	2.65	2. 75 2. 65 2. 80	.15	.0	.10	.0
T TOTAL DOCUMENT OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY O	,				2. 00	2.10	2000	2.00	• 10	0.0	100	

## CHICAGO, MILWAUKEE & ST. PAUL RY.-Continued.

		ım- er.	wei	er- ge ight	Rate mi les:	per les or s to—	day o	f 100 irs or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
				1		1				1		
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOO00>	0.4	00	40	7.0								
Oil	296	23 314	48 51	52 52								
					\$4.70 4.70	\$4.70 4.70	\$2.95 3.10	\$2.95 3.10	\$0.00 .00	0.0	\$0.00	0.0
Coal burners, passenger. Oil burners, freight— 74,000 to 92,100										ĺ		
pounds on drivers Over 140,000 pounds				••••	5.00	5.00	2.95	2.95	.00	.0	.00	.0
on drivers Coal burners, freight— 74,000 to 92,100				••••	5. 20	5. 20	3.10	3.10	.00	.0	.00	.0
pounds on drivers Over 100,000 pounds					5.00	5.00	3.10	3.10	.00	.0	.00	.0
on drivers					5.20	5. 20	3. 25	3.25	.00	.0	.00	.0
OilCoal	70	73 122	76 76	76 76								
Oil burners, freight					5. 20	5. 20	3.10	3. 10	.00	.0	.00	.0
Coal burners, freight Class E4, 000000>					5. 20	5.20	3. 25	3. 25	.00	.0	.00	.0
Oil. Coal.	5			108 108								
Oil burners, freight—	110	100	100	100								
201,000 pounds on drivers					5.30	5.45	3.60	3.60	. 15	2.8	.00	.0
216,500 pounds on drivers					5.55	5.55	3.75	3.75	.00	.0	.00	.0
Coal burners, freight— 201,000 pounds on												
drivers 216,500 pounds on					5.30	5.45	3.75	3.75	. 15	2.8	.00	.0
driversClass F3, 000000>					5.55	5.55	3.75	3.75	.00	.0	.00	.0
Oil	19	20	80	79								
Coal. Oil burners, passenger—	143	142	79	79								
87,000 pounds on drivers					4.55	4.55	2.80	2.80	.00	.0	.00	.0
Over 149,100 pounds on drivers					4.70	4.70	2.95	2.95	.00	.0	.00	.0
Coal burners, passen- ger—												
87,000 pounds on drivers				·	4.55	4.55	2.95	2.95	.00	.0	.00	. 0
Over 149,100 pounds					4.70	4.70	3. 10	3. 10	.00	.0	.00	.0
Class XI, Shay	1	1	50	50								7.1
Freight			••••		4.60	4.85	2.80	3.00	. 25	5.4	. 20	1.1
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class C3, 00000>	163	145	61	58								
Coal burners, freight— 108,000 pounds on							0.10	0.70			00	
drivers Over 123,000 pounds				•	5.00	5.00	3.10	3.10	.00	.0	.00	.0
Class E6, 00000000>		••••	••••	••••	5. 20	5. 20	3.25	3. 25	.00	.0	.00	.0
Mallet: Oil.	20	21	162 167	163								
Coal. Oil burners, freight Coal burners, freight	21	20	167	163	6,30	6.50	4.00	4. 25	. 20	3.2	. 25	6.3
Coal burners, freight					6.30	6.50	4.00	4. 25	. 20	3.2	.25	6.3

## CHICAGO, MILWAUKEE & ST. PAUL RY .- Continued.

		ım- er.	wei o	er- ge ght n	Rate mi less	per les or s to—	day o	f 100 irs or	Increas engine		Increas fireme	
Class.				ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES—contd.												
Class F2, oOOoo>	65	65	47	47								· · · · · ·
drivers		••••			\$4.40 4.55	\$4.40 4.55	\$2.75 2.75	\$2.75 2.75	\$0.00 .00	0.0	\$0.00	0.0
	CH	ICA	GO,	RO	CK IS	LANI	) & G	ULF	RY.	<u> </u>	I	
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3,000> Switching, oil burn- ing—	4	4	61	61								
First-class yards Second-class yards. Class B4, 00000>	36	36	94	94	\$4. 25 4. 00	\$4. 25 4. 25	\$2.50 2.50	\$2.70 2.70	\$0.00 .25	0. 0 6. 3	\$0.20 .20	8.0 8.0 .0
Freight— Through Local Class C2, O O oo>	16	16	30	30	5. 20 5. 45	5.30 5.60	3. 60 3. 85	3.60 3.90	.10 .15	1.9 2.8	.00	1.3
Passenger					4.40	4.40	2.65	2.65	.00	.0	.00	.0
	СН	CAC	io, 1	ROC	K ISI	LAND	& PA	CIFIC	CRY.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> Switching— First-class yards		. 8	32	34	\$4.25	\$4.25	\$2.40	\$2,70	\$0,00	0.0	\$0.30	12.5
Second-class yards. Class A3, 000> Oil	3	4	61	63	4.00	4.00	2. 40	2. 70	.00	.0	.30	12.5
Coal Switching— First-class yards	190	189	64	64	4. 25	4.25	2.50	2.75	.00	. 0	. 25	10.0
Second-class yards. Class B3,000o> Passenger—		56	45	45	4.00	4.40	2.40	2.70	. 40	10.0	.30	12.5
Under 18-inch cyl- inders 18-inch cylinders or					4. 15	4.40	2.85	2.85	.25	6.0	.00	.0
over Freight— Through					4. 40 5. 00	4. 40 5. 00	2.85	2.85	.00	.0	.00	.0
Local Switching— First-class yards					5. 25 4. 25	5.30 4.25	3. 25 2. 50	3.30	.05	1.0	.05	1.6 8.0
Second-class yards.	٠		****	••••	4.00	4. 25	2.40	2.70	. 25	6.3	.30	12.5

CHICAGO, ROCK ISLAND & PACIFIC RY.-Continued.

		ım-	wei o	er- ge ght	Rate mi less	per les or s to—	day o	f 100 irs or	Increas engine		Increase fireme	
Class.			(to	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—Continued.												
Class B4, 00000>												
Oil. Coal.	449	∫ 3 1446	85	{92 {85								
Freight—	,	(-1-		(00								
Coal Freight— Through, consolidation, 20 and 21 inch cylinders— Oil Coal Local. consolida-												
Oil					\$5. 20 5. 20	\$5. 20 5. 20	\$3.35 3.35	\$3.35 3.35	\$0:00 .00	0.0	\$0.00 .00	0.0
Local, consolida- tion, 20 and 21 inch cylinders—					0.20	0.20	3.30	3.33	.00		.00	
Oil					5. 45	5.50	3.60	3.60	. 05	.9	.00	.0
Coal Through, consolida-					5. 45	5. 50	3.60	3. 65	. 05	.9	. 05	1.4
tion, 24-inch cyl- inders and over					5. 20	5.45	3.75	3.75	.25	4.8	.00	.0
Local, consolida- tion, 24-inch cyl-					0.20	0. 40	0.10	0.10	• 20	3.0	.00	.0
other classes—	1				5.45	5.75	4.00	4. 05	.30	5.5	.05	1.3
Through Local					5. 20 5. 45	5.30 5.60	3.60	3.60 3.90	.10	1.9 2.8	.00	2.6
First-class yards Second-class yards.					4.00 4.25	4.40	2.50 2.60	2. 75 2. 65	.40 .15	10.0 3.5	. 25 . 05	10.0
Class C2, OOoo>: Oil	1007	11	(21	<i>∫</i> 44								
Coal Passenger—	5201	280	301	(31								
Under 18-inch cyl-					4.15	4 00			15	0.0		
inders 18-inch cylinders or					4. 15	4.30			.15	3.6		
over 8-wheel,18-inchcyl-					4.40	4.40			.00	.0		
inders and under.							2.65	2.65			.00	.0
8-wheel, 19-inch cylinders							2.75	2.75			.00	.0
Throughfreight, 18 and 19 inch cylinders and												
Oil Coal Local freight— Oil Coal Coal Other classes— Through freight					4.80	4.80	2.85 2.85	2.85 2.85	.00	.0	.00	.0
Local freight—					5. 05	5. 10	3.10	3. 10	.05	1.0	.00	0.0
Coal					5.05	5. 10	3.10	3. 10	.05	1.0	.10	3.2
Other classes— Through freight—												
Other classes— Through freight— Oil. Coal. Local freight— Oil.					4.80	4.80	2.90	2.90	.00	.0	.00	.0
Local freight—					4.80	4.80	2.90	2.90	.00	.0	.00	.0
Coal					5. 05 5. 05	5. 10 5. 10	3. 15	3. 15 3. 15	.05	1.0	.00	.0
Switching— First-class yards Second-class yards.					4.25		2.40					
Second-class yards. Class C3, OOOoo>					4.00		2.40					
Class C3, OOOoo> Oil. Coal. Passenger—	348	{ 2 349	}60	\\\( \) \\\\ \( \) \\\\\ \( \) \\\\\\\\\								
18 and 19 inch cyl-	,	(340		(50)								
inders, connect-					4.40	4.40	2.85	2.85	.00	.0	.00	.0
20 to 24 inch cylinders, connecting.								3.10			.00	.0
51393°—S. Doo		3, 6					0.40					, .,

## CHICAGO, ROCK ISLAND & PACIFIC RY.—Continued.

Class.	Ni b	ım- er.	we dri	ver- ge ight on vers ns).	les	per lles or s to—	1	of 100 urs or omen.	Increas engine		Increas fireme	
	1914	1915		· ·	-	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo>—Contd. Through freight, 18 and 19 inch cylinders, con- necting—												
OilCoal			••••		\$5.00 5.00	\$5.00 5.00	\$3.10 3.10	\$3.10 3.10	\$0.00	0.0	\$0.00 .00	0.0
Local freight— Oil- Coal					5. 25 5. 25	5.30 5.30	3.35 3.35	3.35 3.40	.05 .05	1.0 1.0	.00	.0 1.5
Through freight, 20 and 21 inch cylinders, connecting—												
Oil					5. 10 5. 10	5. 10 5. 10	3.30	3.30 3.30	.00	.0	.00	.0
necting— Oil					5.35	5. 40	3.55	3.55	.05	.9	.00	.0
Coal Switching—		1			5.35	5. 40	3.55	3.60	.05	.9	. 05	1.4
First-class yards Second-class yards. 18-inch cylinders					4. 25 4. 00	4.40			.15	3. 5 6. 3		
and under 19 and 20 inch cyl-							2.40	2.70			.30	13.0
inders 21-inch cylinders		• • • •					2.50	2.70			.20	8.0
class E4, 000000>	75	75		120			2.60	2. 75	••••••		.15	5.8
Through freight	22	22	49	52	5. 45 5. 70	5. 45 5. 75	3.75 4.00	3.75 4.05	.00	.0	.00	.0 1.3
Class F2, 00000> Passenger. Class F3, 000000>		174	78	76	4.40	4.40	2.85	2.85	.00	.0	.00	.0
Passenger— 170,000 pounds and over on drivers					4.40	4. 45	3.10	3.10	.05	1.1	.00	.0
Less than 170,000 pounds on drivers			110	110	4.40	4.40	3.10	3.10	.00	.0	.00	.0
Class F4, 0000000> Passenger		2	112	112	5.05	5.05	3.55	3.55	.00	, 0	.00	.0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class F2, oOOoo> Passenger	8	8	53	53	4. 40	4.40	2.85	2.85	.00		.00	.0
	- 1					J						
CHI	CAC	3O, S	ST. I	PAU	L, MI	NNEA	POLI	S & O	MAHA R	Υ.		
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, 00>	4	1	30		\$4. 25	<b>\$4.</b> 25	\$2.50	\$2.70	\$0.00	0.0	\$0. 20	8.0
Class A3, OOO> Switching— Under 18-inch cyl-	50	50	55	55	4.05	4.95	9 50	2 70	00		90	8.0
inders 18-inch cylinders and over					4. 25 4. 25	4. 25 4. 25	2. 50 2. 55	2.70	.00	.0	.20	8. 0 5. 9

Rates paid to locomotive engineers and firemen before and after the arbitration of 1915, and amount and per cent of increase in rates awarded by the arbitration board according to class of engines—Continued.

## CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RY.—Continued.

Class.		ım- er.	wei o dri	ver- ge ight on vers ns).	less	per les or s to—	day o	of 100 ars or men.	Increas engine		Increas fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class B4, 00000> Freight— 22-inch cylinders	11	11	80	80	\$5, 20	\$5. 20	\$3.30	\$3.30	\$0.00	0.0	\$0.00	0.0
25-inch cylinders Class C2, 0000>	107	94	29	30	5. 40	5. 45	3. 75	3. 75	.05	.9	.00	0.0
Passenger Freight— Under 18-inch cyl- linders					4, 60	4.75	2. 85	2. 85	.15	3.3	.00	.0
18 to 21 inch cylinders	164	163	62	62	4.60	4.75	2. 90	2.90	.15	3.3	.00	.0
Passenger— 18 to 19 inch cylinders 20-inch cylinders					4. 50 4. 50	4. 50 4. 50	2.80 3.05	2. 80 3. 05	.00	.0	.00	.0
Freight— Under 18-inch cyl- inders. 18 to 19 inch cylin- ders.		•••			<b>4.</b> 60 <b>4.</b> 95	4. 95	2.85	3. 10	.00	.0	.00	.0
20-inch cylinders 21 to 23 inch cylinders					5. 05 5. 20	5. 05	3.30 3.30	3.30	.00	.0	.00	.0
Class E4, 000000>				114	5. 65	5. 65	3.75	3. 75	.00	.0	.00	
Class F2, 00000> Passenger Class F3, 000000> Passenger—	7 31	31	46 73	73	4.40	4.40	2, 80	2.80	.00	.0	.00	.0
21 to 23 inch cylinders 25-inch cylinders					4. 50 4. 65	4. 50 4. 65	3.05 3.10	3.05 3.10	.00	.0	.00	.0
•		CO	LOI	RAE	00 & 8	SOUT	HERN	N RY.				
SINGLE-EXPANSION LOCOMO- TIVES.												
Class A3, OOO> Switching	23	19	62	64								
pounds on drivers. Over 140,000 pounds on drivers		• • • •			\$4. 25 4. 25	\$4. 25 4. 40	\$2.50 2.50	\$2. 70 2. 75	<b>\$0.00</b>	0.0	\$0. 20 . 25	8. <b>0</b> 10. 0
Class B3, OOOo>	14	13	32	33	4. 20	4. 20	2. 40	2.40	.00	.0	.00	.0
Class B4, 00000>	105	1100	ſ62	}65	4.80	4.80	2. 90	2. 90	.00	.0	.00	.0
Oil. Freight (narrow gauge). 18 by 24 inch cylin-	7	}109	(86		4.94	4.94	3. 07	3. 07	.00	.0	.00	.0
ders					5. 20	5. 20	3. 19	3. 19	.00	.0	.00	.0
ders					5. 30 5. 55	5.30 5.55	3. 55 3. 65	3. 55 3. 65	.00	.0	.00	.0

## COLORADO & SOUTHERN RY.—Continued.

		ım-	wei o	er- ge ight n	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increase fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C2, OOoo>	4	3	30	30								•••••
17 by 24 inch cylinders					\$4. 25	\$4.25	\$2.40	\$2.40	\$0.00	0.0	\$0.00	0.0
ders					4. 40	4.40	2.65	2.65	.00	.0	.00	.0
Coal	19	19 4	62 54	62 54								
Passenger Class E4, 000000>	5	5	99	99	4. 40	4. 40	2.65	2, 65	.00	.0	.00	.0
Class E5, oOOOOOo>:	,				5.55	5.55	3.75	3.75	.00	.0	.00	.0
FreightClass F3, oOOOoo>Passenger	5	5 5	77	77	4, 60	5. 60	3, 75	3, 80	.00	.0	.00	
FOUR-CYLINDER COMPOUND LOCOMOTIVES.					4.00	4.00	5. 10	5. 70	.00	.0	.00	.0
Class B4, OOOOo>(oil) Freight—	12	12	89	89								
22 by 28 inch cylinders					5.55	5.55	3.65	3. 65	.00	.0	.00	.0
DAVEN	TPOI	DW.	P 0 C	177 1	DT A NT	D & N	IODW.	U WE	STERN ]	DV		
	1		1	1.02. 11	)	1, 6, 1	1	1	DI LILLIA			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO>	3	2	32	32	\$4.00	\$4. 25	\$2,50	\$2.70	\$0.25	6.3	\$0.20	8.0
Class A3, OOO>	8	9	38	44	4.00	4. 25	2.50	2.70	.25	6.3	.20	8.0
Class C2, OOoo> Work train	1	1	26	26	4. 20	4. 75	2. 65	2. 75	. 55	13.1	.10	3.8
	<u> </u>	DI	ENV	ER	<u> </u> &'RI(	GR/	NDE	B. R.	<u> </u>	]		
	1	1	1	1	1	1	1	1	1	1	1	
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000>	. 16	16	70	70	\$4. 25	\$4.40	\$2.70	\$2.75	\$0.15	3.5	\$0.05	1.9
Class A4, 0000>	9	9	30	31	4. 25	4. 25	2.70	2.70	.00	.0	.00	.0
Class A6, 000000> Switching.	5	7	89	66	4. 25	4. 25	2.70	2, 70	.00	.0	.00	.0
Class B3, OOOo>	32	32	50	50	4. 25	4. 25	2. 70	2. 70	.00	.0	.00	.0.
Freight Class B4, 0000o> Freight—	340	340	62	62	5. 31	5.31	3.50	3.50	.00	.0	.00	
117,500 pounds on drivers					5. 31	5, 31	3.60	3, 60	.00	.0	.00	.0
194,000 pounds or over on drivers Class C3, OOOoo>	156	156	53	53	5. 54	5. 54	3.75	3.75	.00	.0	.00	.0
Passenger— Colorado lines	100	100			4, 60	4.60	3.10	3.10	.00	.0	.00	.0
Utah lines					4.60	4. 60	3.00	3.00	.00	.0	.00	0

#### DENVER & RIO GRANDE R. R.-Continued.

		ım-	we:	ver- ge ight	mi	per les or	day o	f 100 urs or	Increas enginee		Increase fireme	
Class.			(to	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.  Class E4, 000000> Freight. Class F3, 000000> Passenger FOUR-CYLINDER COMPOUND	29	29	78	78	\$5. 54 4. 60	\$5.54 4.60	\$3.75 3.10	\$3.75 3.10	\$0.00	0.0	\$0.00	0.0
LOCOMOTIVES.  Class E6, 00000000> Freight  Class E8, 0000000000> Freight	8 16		148	148	6. 54 6. 54	6. 54 6. 54	4. 00 4. 00	4. 25 4. 25	.00	.0	.25	6. 3 6. 3
	101	UTB	i, sc	1011	H SH	JKE 6	ATI	ANTI	CRY.			
SINGLE-EXPANSION LOCO- MOTIVES.  Class A2, OO> Switching. Class A3, OO> Switching.	2 5	4	29	36	\$4.00 4.00	\$4.25	\$2.40 2.40	\$2.70	\$0.25	6.3	\$0.30	12.5
Class B3, 000o>	32	29	79	79	4.80 5.30	4.80	3.00	3.00	.00	.0	.00	0.
Passenger	22	21	27	27	4.40	4.40	2.65	2.65	.00	.0	.00	
Class C3, OOOoo> Passenger Switching Class F3, OOOOoo>	5	5	50	50	4.40	4.40 4.25	2.65	2.65 2.70	.00	.0	.00	.0
Passenger					4.40	4.40	2.65	2.65	.00	.0	.00	.0
		EL	PAS	50 &	SOU	THW	ESTE:	RN CO	), 	1	1	
SINGLE-EXPANSION LOCO- MOTIVES.  Class A3, 000>	17	17	72	77								
Switching	1	1	67	67	\$4.67	\$4.67		\$3.25	\$0.00	0.0	\$0.00	0.0
Switching. Class B3, 0000> Mixed. Class B4, 00000>:	1	1	30	30	4. 67 7. 07	4.67 7.07	3.25	3. 25	.00	.0	.00	.0
Oil. Coal. Oil, mixed.	90	90	63 85	62 85	5, 68	5.68	3.82	3.82	.00	.0	, 00	.0
Coal— Freight Mixed					5.33 5.68	5.33 5.68	3.75 3.82	3.75 3.82	.00	.0	.00	.0
Switching.  Class B5, 000000>  Freight.  Class C3, 00000>	3	3	100	100	4.67 5.60	4. 67 5. 60	3.25	3.25	.00	.0	.00	.0
Passenger Mixed Class E3, 00000>	6	6	69	69	4.40 5.33	4.40 5.33	3. 10 3. 75	3. 10 3. 75	.00	.0	.00	.0
PassengerClass E4, 000000>	5	5	121	121	4.40	4.40	3.10	3.10	.00	.0	.00	0.
Freight. Class F3,0000o> Passenger	16	16	77	77	5.85 4.53	5.85 4.53	3.75	3.75	.00	.0	.00	0.

## FORT WORTH & DENVER CITY RY.

		ım- er.	we.	ver- ge ight	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000> Switching—	12	12	69	69	e4 or	e4 40	00 50	00 77	en 15	2 5		10.0
First-class yards Second-class yards Class B3, OOOo>	6	6	39	39	\$4. 25 4. 25	\$4.40 4.25	\$2,50 2,50	\$2.75 2.70	<b>\$0.15</b>	3.5	\$0. 25 . 20	10. <b>0</b> 8.0
Through freight					5.05 5.55	5. 05 5. 55	3.05 3.25	3.05 3.25	.00	.0	.00	.0
Local freight Class B4, OOOOo> 19 by 20 inch cylinders—	43	43	81	79								
Through freight Local freight 14 by 22 inch cylinders—					5.30 5.80	5. 30 5. 80	3.40 3.60	3.40 3.70	.00	.0	.00	2.8
14 by 22 inch cylinders— Through freight Local freight					5.45 5.95	5. 45 5. 95	3.60	3.60 3.90	.00	.0	.00	.0 2.6
Class C2, OOoo>  Passenger  Class C3	9	3	30	30	4.40	4.40	2.50	2.50	.00	.0	.00	.0
Class C3, OOOoo> Passenger Class E4, OOOOOo> (oil)		10		99	4.40	4.40	2.70	2.70	.00	.0	.00	.0
Through freightClass F3, 000000>	5	5	77	77		5.45		3.60				
Passenger					4.40	4.40	3.75	3.75	.00	.0	.00	.0
	F	ORT	W	ORT	H & I	RIO G	RANI	DE R.	R.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class B3, OOOo>Freight	9	9	49	50	\$5.00	\$5.00-	\$3.10	\$3.10	\$0.00	0.0	\$0.00	00.0
Class C2, OOoo> Passenger—	4	4	28	28								
Under 18-inch cyl- inders 18-inch cylinders or					4. 1,5	4.30	2.40	2.50	.15	3.6	.10	4.2
over		••••			4.40	4.40	2.65	2.65	.00	.0	.00	.0
			FOI	RT I	WORT	H BE	LT R	Y.				
SINGLE-EXPANSION LOCO-												
Class A2, OO> Switching.	4	4	40	40	\$4. 25	\$4. 25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8. <b>0</b>
Class A3, OOO> Switching.	3	3	56	56	4. 25	4. 25	2.50	2. 70	.00	.0	.20	8.0
					1		J	J				
GALY	ES'	ron	, н.	ARR	ISBU	RG &	SAN	ANTO	ONIO RY.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> (oil) Switching— First-class yards	1	1	29	29		\$4. 25		\$2.70	<b>\$0</b> .00	0.0	\$0. 20	8.0
Second-class yards					4.00	4. 25	2.40	2.70	. 25	- 6.3	.30	12.5

GALVESTON, HARRISBURG & SAN ANTONIO RY.—Continued.

_			ım- er.	we	ver- ge ight	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increas fireme	e to
	Class.			(to	vers ns).	Engi	neers.	Fire	men.				
		1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SII	NGLE-EXPANSION LOCO- MOTIVES—continued.												
Cl	ass A3, 000>: Oil	26	27	63	63								
	Oil burners, switching—	3	2	52	45		04.40	20. 70	20.75	20.15		00.07	10.0
	First-class yards Second-class yards Coal burners, switch-					\$4.25 4.00	\$4.40 4.25	\$2.50 2.40	\$2.75 2.70	\$0.15 .25	3. 5 6. 3	\$0.25 .30	10. <b>0</b> 12. <b>5</b>
	ing— First-class yards Second-class yards					4. 25 4. 00	4. 25 4. 25	2. 50 2. 40	2. 70 2. 70	.00	.0	.20	8. 0 12. 5
Cl	ass B3, 000o>: Oil	54	56	64	64	2,00			2000				14.0
	Freight, class B engines (oil and coal)—	1	1	56	56		•••••						
	Between Valentine and Sanderson					5. 21	5. 21			.00	.0		
	Between Sanderson and Del Rio All other divisions					5. 69 5. 13	5. 69 5. 13			.00	.0		
	Freight, class C engines					0.20	0.20			700			
	Valentine and San- derson					5. 43	5. 43			.00	.0		
	Rio	••				5. 94 5. 35	5. 94 5. 35			.00	.0		
	Freight, class B (coal burners)—												
	Houston and Glid- den	••••						3. 03 3. 03	3. 03 3. 03			.00	.0
	Del Rio and Glid- den							3.14	3.14			.00	.0
	tine							3. 24	3. 24			.00	.0
	derson							3. 35	3. 35			.00	.0
	Sanderson and Del							3. 55	3. 55			.00	.0
	Freight, class B (oil burners)— Houston and Glid-												
	den Victoria division							2. 88 2. 88	2. 88 2. 88			.00	.0
	Del Rio and Glid- den. El Paso and Valen-							2.99	2.99			.00	.0
	tineValentine and San-							3. 09	3. 09			.00	.0
	Sanderson and Del							3. 20	3. 20			.00	.0
	Rio. Freight, class C (oil burners)—							3. 40	3.40			.00	.0
	Houston and Glid- den							3. 01	3. 01			.00	.0
	Del Rio and Glid-							3. 01	3. 01			.00	.0
	den El Paso and Valen-		••••	••••				3.12	3.12			.00	.0
	Valentine and San-	• • • •	••••	• • • •		• • • • • •	•••••	3. 23	3. 23			.00	.0
	Sanderson and Del		••••	• • • •	• • • •		•••••	3. 34	3.34			.00	.0
	Rio			••••				3. 55	3. 55			.00	.0

## GALVESTON, HARRISBURG & SAN ANTONIO RY. CO.—Continued.

													_
	Nu be		wei o	ght n	mil	per es or s to—	day o 10 hou	f 100 irs or	Increase enginee		Increase fireme	e to	
Class.				vers ns).	Engi	neers.	Fire	men.					
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Percent	
SINGLE-EXPANSION LOCO- MOTIVES—continued.													
Class B4, OOOOo> (oil) Freight, class C engines—	48	48	94	94	• • • • •		••••						••
Valentine and San- derson					<b>\$</b> 5. <b>4</b> 3	\$5.43			<b>\$0.</b> 00	0.0		<b></b>	••
Rio All other divisions Freight, class C en-					5. 94 5. 35	5. 94 5. 35			.00	.0			
gines— Houston and Glidden Victoria division							\$3.01 3.01	\$3.30 3.30			\$0. 29 . 29		.6
Del Rio and San- derson El Paso and Valen-							3. 12	3.30			.18		. 8
tine							3. 23	3.30			.07	2	. 2
Valentine and San- derson Sanderson and Del				••••			3. 34	3. 34			.00		.0
Class C2, OOoo>:							3. 55	3. 55			.00		.0
OilCoal.	30	30	32 25	32 25									••
Branch, mixed— Clinton Branch Gonzales Branch					4.65 4.40	4. 65 4. 40			.00	.0			••
Port Lavaca Branch Wharton-Palacios					4.40	4.40			.00	.0			••
Branch					4.40	4.40			.00	.0			••
Branch La Grange Branch Beeville Branch					4. 40 4. 80 4. 80	4. 40 4. 80 4. 80			.00	.0			••
Port Lavaca-Cuero					4.80	4.80			.00	.0			
Branch, passenger— Less than 18-inch cylinders					4. 15	4.30	2. 40	2. 50	.15	3.6	.10	4	. 2
18-inch cylinders and over Passenger					4.40 4.40	4. 40 4. 40	2. 65 2. 65	2. 65 2. 65	.00	.0	.00		0.0
Branch, mixed— Eagle Pass Branch—							2.82	2. 82			.00		.0
Oil Coal Gonzales Branch—							2.96	2.96			.00		.0
Oil Coal.							2. 40 2. 55	2. 40 2. 55			.00		.0
Branch— Oil							2.48 2.63	2. 48 2. 63			.00		.0
Coal Port Lavaca Branch— Oil							2. 40	2.40			.00		.0
Beeville-Victoria—							2. 55	2. 55			.00		.0
Oil Coal Wharton - Palacios							2. 72 2. 86	2. 72 2. 86			.00		.0
Branch— OilCoal							2. 60 2. 75	2. 60 2. 75			.00		.0
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## GALVESTON, HARRISBURG & SAN ANTONIO RY. CO.—Continued.

Class.		ım-	wei o dri	er- ge ight n vers ns).	less	per les or s to—	day o	of 100 ars or men.	Increas engine		Increas fireme	
			(10)	us).	Engi	16613.	THE	шеи.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C2, OOoo>—Contd. Branch, mixed—Contd. Hawkinsville												
Branch— Oil Coal Clinton Branch—							\$2.40 2.55	\$2.40 2.55			\$0.00 .00	0.0
Oil							2. 47	2.47			.00	.0
Class C3, OOOoo>:	66	66	51	51			2. 62	2.62			.00	.0
Coal Branch, freight—	25	25	42	42								
Lá Grange Branch— Oil					\$4.80	\$4.80	2.60	2. 85	\$0.00	0.0	. 25	9.6
Coal Wharton-Bay City					<b>4.</b> 80 <b>4.</b> 80	4.80	2. 75	3.00	.00	1.0	. 25	9.1
runs Victoria Division, locals—												
Oil		22	105	105	4. 80 4. 80 4. 40	4. 90 4. 90 4. 40	2. 65 2. 75 2. 65	2. 85 3. 00 2. 65	.10 .10 .00	2. 1 2. 1 . 0	. 20 . 25 . 00	7.5 9.1 .0
Freight— Sanderson and Del Rio					5. 94	5. 94	3. 55	3. 55	.00	.0	.00	.0
Class F2, 00000> (oil) Passenger—	1	2	51	53	5. 35	5.45	3. 23	3. 55	.10	1.9	.32	10.0
Less than 110,000 pounds on drivers 110,000 to 140,000				- • • •	4.40	4. 40	2.65	2.65	.00	.0	.00	.0
pounds on drivers Class F3, 000000> (oil)	12	12	86	86	4.40	4.60	2.65	2.78	.20	4.5	. 13	4.9
Passenger FOUR-CYLINDER COMPOUND					4.80	4.80	2.90	2.90	.00	.0	.00	.0
Class B3, OOOo>	9	7	76	75								
Freight, class B (oil burners)					5. 35	5. 35	3.01	3. 05	.00	.0	.04	1. 3
Class E6, 00000000> Freight— El Paso and Valen-	12	12	149									
tine Valentine and San- derson		• • • •				6. 10	4.00	4.00	.00	.0	.00	.0
Sanderson and Del						6. 69	4.00	4.00	.00	.0	.00	.0
Rio Class F2, 00000> (oil) Passenger—	5	5	53	53	6.69							
Less than 110,000 pounds on drivers 110,000 to 140,000						4.40	2.65	2.65	.00	.0	.00	.0
pounds on drivers					4.60	4.60	2.78	2.78	.00	.0	.00	.0

### GREAT NORTHERN RY.

		ım- er.	we.	er- ge ight n	mil	per es or to—	day <b>o</b> 10 hou	f 100 irs or	Increase enginee		Increase fireme	
Class.				vers ns).	Engir	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000>:  Oil	8 111	8 111	59 62	62 62								<del>-</del>
Oil, first-class yards. Coal, first-class yards Class A4, <0000>, elec-					\$4. 25 4. 25	\$4. 25 4. 25	\$2.35 2.50	\$2. 55 2. 70	\$0.00 .00	0.0	\$0. 20 . 20	8. 5 8. 0
tric. Helper. Class B2, OOo>, oil motor	4	4	114	114	4. 90	4. 90	3. 30	3. 30	, .00	.0	.00	.0
PassengerClass B3, OOOo>:	1	7	23	23	4, 40	4. 40			.00	.0		
Oil	77 99	55	11 46	39 39								
74,000 to 112,000 pounds on drivers All others Oil burners—					4. 80 5. 05	4. 80 5. 05	3. 10 3. 30	3. 10 3. 30	.00	.0	.00	.0
74,000 to 112,000 peunds on drivers					4. 80	4. 80	2. 95	2. 95	.00	.0	.00	.0
All other engines					5.05	5. 05	2. 95	2. 95	.00	.0	.00	.0
Switching— First-class yards Second-class yards.					4. 25 4. 00	4. 25 4. 25	2. 50 2. 40	2. 70 2. 55	.00	. 0 6. 3	. 20	8. 0 6. 3
Switching (oil)— First-class yards Second-class yards.					4. 25 4. 00	4. 25 4. 25	2. 35 2. 35	2. 55 2. 55	.00	6.3	. 20	8. 5 8. 5
Class B4, OOOOo>: Oil	27 227	27 177	82 82	80 80								
Öil					5. 30 5. 30	5. 30 5. 30	3, 40 3, 55	3. 40 3. 55	.00	.0	.00	.0
Oil	139	3 108	28 26	25 25								
Oil Coal Freight—	1				4. 40 4. 40	4. 40 4. 40	2. 40 2. 55	2. 40 2. 55	. 00	.0	.00	.0
Oil Coal Class C3, OOOoo>:					4. 80 4. 80	4. 80 4. 80	2. 80 2. 95	2. 80 2. 95	.00	.0	.00	.0
Oil	1	6 26	68 63	55 55								
112,000 pounds or less on drivers Over 112,000 pounds					4. 40	4. 40			.00	.0		
on drivers	1				4. 65	4. 65	2. 85 3. 05	2. 85 3. 05	.00	.0	.00	.0

GREAT NORTHERN RY .- Continued.

	1	TRE	AT	1401	1	RN B		ontinu	eu.		1	
		ım- er.	we.	er- ge ight n	mı	per les or s to—	day o	of 100 ers or	Increas engine		Increas fireme	e to
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo>—Con. Freight—												
112,000 pounds or less on drivers					\$4.80	\$4.80		•••••	\$0.00	0.0		
Over 112,000 pounds on drivers Between 140,000 and					5. 05	5. 05			.00	0		
170,000 pounds on drivers						5. 10						
77,000 pounds on drivers							\$3. 10	<b>\$</b> 3. 10			\$0.00	0.0
85,000, 120,000, and 134,000 pounds on drivers							3. 30	3. 30			.00	.0
130,000 pounds on							3. 55	3. 55			.00	.0
drivers							3. 75	3.75			. 00	. 0
Class C4, OOOOoo>: Oil	14 87	14 86	71 73	73 73								
Freight— Oil	01	00	10	10	5. 30	5. 30	3. 40	3, 40	.00	.0	.00	.0
Class E3, oOOOo>	135	133	75	76	5. 30	5. 30	3. 55	3. 55	. 00	.0	.00	.0
Class E4. 000000>:	2	5	110	110	5. 30	5. 30	3. 55	3, 55	.00	.0	.00	.0
Oil. Coal Freight.	68	65	110	110 110	5. 55	5. 55	3. 75	3. 75	.00	.0	.00	.0
Passenger	86	86	96	76	4. 65	4, 65	3.05	3. 05	.00	.0	.00	.0
Oil	5	5	110	110								
Coal	10	10	110	110	5. 15	5. 15	3. 30	3. 75	.00	.0	. 45	13. 6
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class B7, 0000-0000> (Mallet)	36	36	175	175								
Freight Class B8, 000000000> (Mallet):					6. 30	6. 50	4.00	4. 25	. 20	3. 2	. 25	6.3
Oil	- 8 17	8 17	210 210	210 210								
Freight. Class E6, 00000000> (Mallet):					6. 30	6. 50	4. 00	4. 25	. 20	3.2	. 25	6.3
Coal	29 38	19 3	147 128	158 158								
Freight Class F2, 00000>	10	10	50	50	6. 30	6. 50	4.00	4. 25	. 20	3. 2	. 25	6.3
Passenger	1				4. 65	4. 65	3.05	3. 05	.00	.0	.00	.0
		но	UST	ON	& TE	XAS (	CENTI	RAL I	R. R.			
SINGLE-EXPANSION LOCOMOTIVES.												
Class A2, OO>	1											
First-class yards Second-class yards					\$4, 25 4, 00		\$2, 50 2, 40					

#### HOUSTON & TEXAS CENTRAL R. R.-Continued.

		ım-	wei o	ght n	l mu	per les or s to—	day o	f 100 irs or	Increase enginee		Increase	e to n.
Class.			driv (to	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class A3, 000>:												
Oil Coal	17	23	${62 \atop 60}$	61								
Switching-	1	ľ	(50				20 50		00 15			10.0
First-class yards Second-class yards.					\$4. 25 4. 00	\$4.40 4.25	\$2.50 2.40	\$2.75 2.70	\$0.15 .25	3. 5 6. 3	\$0.25 .30	10. <b>0</b> 12. <b>5</b>
Class B3, 000o>:	l				1.00	10 400	2. 10	2. 10		0.0	•00	12.0
OilCoal	6 16	7 12	76 74	76 75					· • • • • • • • • • • • • • • • • • • •			
Freight, oil and coal—					4.00				00	, .		
Houston to Hearne					4. 88 5. 31	5. 10 5. 31			.22	4.5		
Ennis to Dennison.					5. 16	5. 16			.00	.0		
Hempstead to Aus- tin	1	ŀ			5. 23	5. 23			.00	.0		
Austin to Llano					4.98	5. 10			.12	2.4		
Houston and Hemp- stead, round trip.					5. 15	5. 15			.00	.0		
Hearne and Hemp-	-				1	0, 10		*****				
stead, round trip.					4.98	5. 10			.12	2.4		
stead, round trip. Hearne and Hock- ley, round trip.					4.98	5.10			.12	2.4		
EHIIISAHA DIEHIOHA					E 21	5, 31			.00	.0		
round trip Ennis, Corsicana,					5. 31	0. 01	*****		.00	.0		
and Dallas, round		1			F 00	# 00			.00			
trip Ennis and Fort					5. 22	5. 22			.00	.0		
worth, round					- 0"	F 0=			00			
trip Bremond and Waco					5. 27 5. 14	5. 27 5. 14			.00	.0		
Hempstead and	1											
Ledbetter Turn Hempstead and	-				5. 23	5. 23	•••••		.00	.0		
Giddings, round					- 00	- 00						
trip Freight—					5. 23	5. 23			.00	.0		
Ŏil							2. 85	3.05			. 20	7.0
Class B4, 00000> (oil)	2	2	94	94			3.00	3. 20			. 20	6.7
Freight— Houston to Hearne	-	_	1	1	4.00	F 00				0.0		
Houston to Hearne Hearne to Ennis					4. 88 5. 31	5. 30 5. 31			.42	8.6		
Ennis to Dennison					5. 16	5. 30			.14	2.7		
Hempstead to Aus- tin					5. 23	5. 30			.07	1.3		
Austin to Llano					4.98	5. 30			.32	6.4		
Houston and Hemp	-				5.15	5, 30			.15	2.9		
stead, round trip Hearne and Hemp-					i							
stead, round trip Ennisand Bremond					4.98	5.30			.32	6.4		
round trip					5. 31	5. 31			.00	0.0		
Ennis, Corsicana,												
and Dallas, round trip					5. 22	5.30			.08	1.5		
trip Ennis and Fort												
Worth, round					5. 27	5.30			.03	0.6		
Bremond and Waco		-			5.14	5.30			.16	3.1		
Hempstead and Ledbetter Turn.					5. 23	5.30			.07	1.3		
Hempstead and Gid						1			.07	1.3		
dings, round trip Freight					5. 23	5, 30	2, 85	3.30	.07	1.3	. 45	15.8

## HOUSTON & TEXAS CENTRAL R. R.-Continued.

Class.	Nu be	m- er.	wei o dri	rer- ge ight n vers ns).	les	per les or s to—	10 hou	of 100 urs or men.	Increas engine		Increas fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C2, OOoo>: Oil	2	14 3	35 27	35 27	\$4.40	\$4.40	<b>\$2.</b> 65	\$2.65	\$0.00	0.0	\$0.00	0.0
Cylinders less than 18 inches					4.15	4. 30	2.40	2. 50	.15	3.6	.10	4. 2
and over  Branch passenger, coal.  Class C3, OOOoo>:					4. 40 4. 40	4. 40 4. 40	2.65 2.65	2. 65 2. 65	.00	.0	.00	.0
OilCoal	12	40 8	47 45	47 39								
Branch freight, oil— Lampasas branch Waxahachie short						4. 80	2.75	2.75	.00	.0	.00	.0
Fort Worth branch Hearne-Stone City						4. 80 4. 80	2.75 2.75	2.75 2.75	.00	.0	.00	.0
run. Waco branch. Austin branch. Dalsa line. Freight, oil. Branch freight, coal— Lampasas branch. Warnbach branch.					4. 80 4. 90 4. 90 4. 90 4. 90	4. 80 4. 90 4. 90 4. 90 4. 90	2. 75 2. 85 2. 85 2. 85 2. 85 2. 85	2. 75 2. 85 2. 85 2. 85 2. 85 2. 85	.00 .00 .00 .00	.0 .0 .0	.00 .00 .00 .00	.0 .0 .0
Branch freight, coal— Lampasas branch Waxahachie branch. Fort Worth branch. Hearne-Stone City					4.80	4. 80 4. 80 4. 80	2. 90 2. 90 2. 90	2.90 2.90 2.90	.00	.0	.00	.0 .0 .0
run Waco branch Austin branch Dalsa line					4.90 4.90	4. 80 4. 90 4. 90 4. 90	2, 90 3, 00 3, 00 3, 00	2, 90 3, 00 3, 00 3, 00	.00 .00 .00	.0 .0 .0	.00 .00 .00	.0
	H	USI	ron	EA	ST &	WES	T TE	XAS	RY.			
SINGLE-EXPANSION LOCO-												
Class C2, OOoo> (oil) Passenger— Cylinders under 18 inches in diame-	2	2	32	32								
ter					\$4.15 4.40	\$4.30 4.40	\$2.40 2.65		<b>\$0.15</b>	3.6	\$0.10 .00	.0
Oil Coal Freight— Oil	1	13 1	46 33	46 34	4.90	4.90	2.77	2.77	.00	.0	.00	.0
Coal					4.90	4.90	2.92	2.92	.00	.0	.00	.0

## ILLINOIS CENTRAL R. R.

-		ım-	we:	7er- ge ight	mi	per les or s to—	day o	of 100 urs or	Increas		Increas	
Class.	b	er.	dri	vers ns).	Engi	neers.	Fire	men.	engine	ers.	fireme	en.
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> Switching—	16	15	34	36							·	
First-class yards Second-class yards.					\$4.25 4.00	\$4.25 4.25	\$2.50 2.40	\$2.70 2.70	\$0.00 .25	0.0 6.3	\$0.20 .30	8.0 12.5
Class A3, 000>	189	212	69	65	4.00	4.20	2.40	2.10	.20			12.3
Switching— First-class yards					4.25	4.40	2.50	2.75	.15	3.5	25	10. <b>0</b>
Second-class yards. Class B3, OOOo>	255	225	52	54	4.00	4. 25	2.40	2.70	.25	6.3	.30	12.5
Freight— 19-inch cylinders					5.05	5.05	3.05	3.05	.00	.0	.00	.0
					4.90 5.15	4.90 5.15	2.95 3.20	2.95 3.20	.00	.0	.00	.0
Class B4, OOOOo> Freight—	353	353	86	86				0.20				
20 by 24 inch cylin-					- 15	- 00	0.00	0.45	4.5		0.5	- 0
ders 21 by 24 inch cylin-					5.15	5.30	3.20	3.45	.15	2.9	. 25	7.8
ders 22 by 26 inch cylin-					5.15	5.30	3.20	3.45	.15	2.9	. 25	7.8
ders 23 by 30 inch cylin-					5.15	5.40	3.45	3.45	.25	4.9	.00	.0
ders Mikado					5. 15 5. 40	5. 40 5. 45	3.31 3.75	3. 45 3. 75	. 25	4.9	.14	4.2
Class C2, 0000>	107	83	41	35		0.40						
Passenger— Less than 18-inch												
cylinders 18-inch cylinders					4.15	4.30	2.40	2.50	.15	3.6	.10	4.2
class C3, OOOoo>	148	137	57	56	4.40	4.40	2.70	2.70	.00	.0	.00	.0
Passenger Freight—					4.40	4.40	2.75	2.75	.00	.0	.00	.0
19 by 24 inch cylin-					4.90	4.90	3.05	3.05	.00	.0	.00	.0
ders 19 by 26 inch cylin-												
ders 20 by 28 inch cylin-					5.05	5.05	3.05	3.05	.00	.0	.00	.0
ders Class C4, 000000>	1	1	91	91	5.15	5.15	3.20	3.20	.00	.0	.00	.0
FreightClass E4, oOOOOo>	200	250	109	109	5.40	5.40	3.31	3.45	.00	.0	.14	4.2
Freight. Class F2, 00000>	26	26	51	51	5.40	5.45	3.75	3.75	.05	.9	.00	.0
Passenger—	20	20	01	OI								
20 by 28 inch cylinders					4.40		2.80					
Less than 80,000 pound drivers					4.40	4.40	2.80	2.80	.00	.0	.00	.0
80,000 to 100,000 pound drivers					4.40	4.40	2.80	2.80	.00	.0	.00	.0
100,000 to 140,- 000 pound												
drivers	100	109	75	75	4.40	4.40	2.80	2.80	.00	.0	.00	.0
Passenger—	109	109	10	10	4 40	4.40	0.00	0.05	00	0	٥٥	1.8
20-inch cylinders 25 and 22½ inch cyl-				• • • •	4.40	4.40	2.80	2.85	.00	.0	.05	
Class H2, ooOOo>	21	21	28	28	4.40	4.40	2.85	2.85	.00	.0	.00	.0
Passenger, 16 by 22 inch cylinders—												
Less than 80,000 pounds on drivers.					4.15	4.30	2.45	2.50	.15	3.6	.05	2.0
80,000 to 100,000 pounds on drivers.					4.15	4.30	2.45	2.70	.15	3.6	.25	10.2
podiason arrivers.	,	,			1.10	1.00	2. 10	. 2.10	• 20	0.01	.20 1	20.00

### ILLINOIS CENTRAL R. R.-Continued.

Class.		ım- er.	we odri	ver- ge ight in vers ns).	les:		day of 10 hou		Increas engine		Increas fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.  Class H3, 000000>  Passenger, 18 by 22 inch cylinders— Less than 80,000 pounds on drivers. 80,000 to 100,000 pounds on drivers. Class I3, 0000000>  Passenger, 18 by 24 inch cylinders—	6	5	37	43	\$4.40 4.40	\$4.40 4.40	\$2.70 2.70	\$2.70 2.80	\$0.00	0.0	\$0.00 .10	0.0
Less than 80,000 pounds on drivers. 80,000 to 100,000 pounds on drivers. Class K2, 000000> Passenger, 17 by 24 inch cylinders— Less than 80,000 pounds on drivers. 80,000 to 100,000 pounds on drivers.	10	10	36	36	4. 40 4. 40 4. 15 4. 15	4.40 4.40 4.30 4.30	2.70 2.70 2.45 2.45	2.70 2.70 2.50 2.70	.15	.0 .0 3.6 3.6	.00	2.0

### INTERNATIONAL & GREAT NORTHERN RY.

SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000> (oil)	1	1	67	67	\$4.25	\$4 25	\$2.50	\$2.70	\$0.00	0, 0	\$0, 20	. 8.0
Class B4, 00000> (oil)	23	23	92	92								
Through Local					5. 40 5. 75	5. 40 5. 75	3.50	3.50	.00	.0	.00	. 0 5. 6
Class C2, O O oo>:	5	5	27	27								
Coal	23	23	31	32								
Less than 100,000 pounds on drivers 100,000 and less than					4. 15	4. 30	2.40	2.50	. 15	3.6	.10	4.2
170,000 pounds on drivers					4, 40	4, 40	2, 65	2,65	.00	.0	.00	.0
Freight, coal burners— Through					4.95	4.95	3.00	3.00	.00	.0	.00	.0
Local Freight, oil burners—					5.30	5.30	3. 35	3. 35	.00	.0	.00	.0
Through Local					4.95 5.30	4.95 5.30	2.85 3.20	2.85 3.20	.00	.0	.00	.0
Switching. Class C3, OOOoo>: Oil.					4.25	4. 25	2. 50	2.70	.00	.0	. 20	8.0
Coal. Passenger, coal burners	17	17	57 51	57 51	4, 40		2, 65					
Engines 18 and 19 inch cylinders					4.40	4. 40	2.65	2, 65	.00	.0	.00	.0
Engines with 20-inch					4.40	4.40	2.80	2. 80	.00	.0	.00	.0
Freight, coal burners— Through					5.05	5. 05	3.00	3, 15	.00	.0	.15	5.0
Local					5.30	5.35	3. 20	3.45	.05	.9	.25	7.8

## INTERNATIONAL & GREAT NORTHERN RY.-Continued.

INTERD	ATI	LOIN.	AL	SZ G÷.	REAT	NOR	THE	KN K	Y.—Contir	iued.		
Class.	Class.					per es or s to—	day o	f 100 ars or men.	Increas engine		Increase fireme	
			(10.	ns). 	Engi		1116	men.				
,	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoc>—Con. Freight, oil burners— Engines 100,000 and less than 140,000 pounds on driv- ers—												
Through Local Engines 80,000 and less than 100,000 pounds on driv-					\$5.05 5.30	\$5.05 5.35	\$3.00 3.20	\$3.00 3.30	\$0.00	0.0	\$0.00	0.0 3.1
ers— Through Local Engines 140,000 and less than 170,000 pounds on driv-					5. 05 5. 30	5. 05 5. 35	2.85	2.85 3.20	.00	.0	.00	.0
ers— Through Local Switching					5. 20 5. 55 4. 25	5. 20 5. 55 4. 25	3. 20 3. 45 2. 50	3. 20 3. 50 2. 70	.00	.0	.00	.0 1.4 8.0
KA	NSA	S C	ITY,	, CL	INTO	N & S	PRIN	GFIE	LD RY.	. •		
SINGLE-EXPANSION LOCO- MOTIVES,												
Class C2, OOoo>	12	12	26	26	\$4.15 5.00	\$4.30 5.00	\$2.40 2.95	\$2.50 2.95	\$0.15 .00	3.6	\$0.10 .00	4.2
•		K	ANS.	AS (	CITY	SOUT	HERN	N RY.				
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000>:  Oil	7 29	7 28	59 62	59 65								
First-class yards Second-class yards. Class B3, OOOo> Through freight	1		50		\$4.25 4.00 4.80	\$4.25 4.25	\$2.50 2.40 3.05	\$2.70 2.70	\$0.00 .25	0.0 6.3	<b>\$</b> 0. 20 . 30	8. <b>0</b> 12. 5
Local freightClass B4, OOOOo>:	24	24	90	91	4.80		3. 15					
Coal	58	58	94	94	4. 40 5. 65	5. 65 5. 65			.00	.0		
21 by 30 inch cylin- ders— Through freight	t						3.06	3.06 3.14			.00	.0
Local freight 22 by 30 inch cylinders— Through freight	t						3. 14	3.06			.00	.0
Local freight	1	1	1	1	1	·	3.15	3.15			.00	.0

## KANSAS CITY SOUTHERN RY.—Continued.

		ım- er.	wei o	er- ge ight n	mi	per les or s to—	day o	of 100 ars or	Increas engine		Increas fireme	
Class.				ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class B4, 0000o>—Con. Coal burners— 21 by 30 inch cylin-												
ders— Through freight Local freight 22 by 28 inch cylin- ders—							\$3.35 3.45	\$3.35 3.45			<b>\$0.</b> 00	0.0
Through freight Local freight 22 by 30 inch cylinders—							3.40 3.50	3. 40 3. 50			.00	.0
Through freight Local freight Class C2, OOoo> (oil) Passenger—	7	6	35	36			3. 45 3. 55					
Less than 18-inch cylinders 18-inch cylinders and over					\$4.15 4.40	\$4.30	2. 40 2. 65	2.50	<b>\$0.15</b>	3.6	.10	4.2
Class C3, OOOoo>: Oil Coal Passenger—	33 13	33 13	55 54	56 54								<b>·</b>
Less than 18-inch cylinders 18-inch cylinders and over	•				4.15	4. 15	2. 65 2. 65	2. 65	.00	.0	.00	.0
Freight—Coal burners. helper					4.40							
ders— Through Local 20 by 26 inch cylinders—					5. 05 5. 30	5. 05 5. 30	3.05 3.15	3. 05 3. 15	.00	.0	.00	.0
Through Local Freight, oil burners—					5. 05 5. 30	5. 05 5. 30	3. 20 3. 30	3. 20 3. 30	.00	.0	.00	.0
Through Local Class F3, 000000>	8	8	80	80	5. <b>0</b> 5 5. <b>3</b> 0	5. 05 5. 30	2.90 3.00	2.90 3.00	.00	.0	.00	.0
PassengerClass H2, 000Oo>	1	1	29	29	5.40	5. 40	2.80	2.80	.00	.0	. 00	.0
Passenger Class 000000-Shay(oil). Switching	2	2	120	120	4.15	4. 30	2.40	2. 50	.45	3.6	.10	4. 2 10. <b>0</b>
FOUR-CYLINDER COMPOUND LOCOMOTIVES.					1.20		2.00	2.10	.10	0.0	.20	20.0
Class A6, 000000>(Mallet):	7	8	176	176		1						
Coal. Through freight Local freight	5			176	6. 40 6. 65	6.50 6.65	4.00	4. 25 4. 25	.10	1.6	. 25 . 25	6.3 6.3

## KANSAS CITY TERMINAL RY.

		1	WTA PO	Ab		TELD	IINAI	J RI.				
Class.	Nu b	ım- er.	we:	er- ge ight n vers	mi les	les or s to—	day o	urs or	Increas engine		Increas firem	
Olaas.			(to	ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.											,	\
Class A2, OO>	28 2	28 2	80 41	40 70 45	\$4.25	\$4.25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8.0
pounds on drivers. 140,000 pounds and					4.25	4.25	2.50	2.70	.00	.0	.20	8.0
over on drivers Class A4, 0000> (oil) Switching	2	2	93	85	4.25	4.40	2.50	2.75	.15	3.5	.25	10.0
DWITCHING					1.20	1.10	2.00	2.10	.10	0.0	.20	10.0
		L	OUIS	IAN	TA & .	ARKA	NSAS	RY.				
SINGLE-EXPANSION LOCO- MOTIVES.												
Class B3, 000o> Local freight Through freight Work  Class B4, 0000o> Yard Local freight Through freight Work  Class C2, 00oo> Passenger Less than 80,000 pounds on drivers		1	57	57	\$5.65 5.10 4.90 4.20 5.65 5.40 4.90	\$4. 25 5. 65 5. 40 4. 90	\$3. 10 2. 95 2. 85 2. 60 3. 10 3. 20 2. 85	\$2.70 3.50 3.20 3.20	\$0.05 .00 .00 .00	1. 2 . 0 . 0 . 0	\$0.10 .40 .00 .35	3.8 12.9 .0 12.3
80,000 to 100,000				• • • •								
pounds on drivers Class C3, 000oo>	22	22	61	61	3.65	4.30	2.15	2.55	.65	17.8	.40	18.6
YardLocal freightThrough freight—					3.65 4.20 5.65	4.40 4.25 5.65	2. 15 2. 60 3. 10	2. 60 2. 70 3. 50	.75 .05 .00	20.5 1.2 .0	.45 .10 .40	20. 9 3. 8 12. 9
Less than 140,000 pounds on drivers					5.40	5.40	3.20	3.20	.00	.0	.00	.0
140,000 pounds and over on drivers Work—					5.40	5.40	3.20	3.25	.00	.0	. 05	1.6
Less than 140,000 pounds on drivers					4.90	4.90	2.85	3.20	.00	.0	.35	12.3
140,000 pounds and over on drivers					4.90	4.90	2.85	3. 25	.00	.0	. 40	14.0
		L	OUI	SIA	NA W	ESTE	RN R	R. R.				
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> (oil) Switching— First-class yards Second-class yards.			- 1		\$4.25 4.00		\$2.50 2.40					

## LOUISIANA WESTERN R. R.-Continued.

Class.		ım- er.	we:	ver- ge ight in vers ns).	les	per les or s to—	10 hot	of 100 urs or men.	Increas engine		Increase fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.  Class A3, OOO >: Oil	5 8 8	5 8 8	76 36 28	76 36 28	\$4. 25 4. 00 4. 25 4. 00 5. 35 4. 80 4. 40 4. 40 4. 80	\$4. 40 4. 25 4. 25 4. 25 5. 35 4. 80 4. 40 4. 40 4. 80	\$2.50 2.40 2.50 2.40 3.01 2.65 2.40 2.72 2.80	\$2. 75 2. 70 2. 70 2. 70 2. 70 2. 65 2. 50 2. 72 2. 80	\$0.15 .25 .00 .25 .00	3.5 6.3 .0 6.3 .0	\$0.25 .30 .20 .30 .04	10.0 12.5 8.0 12.5 1.3 .0 4.2
branch. Class F2, 00000> (oil) Passenger Class F3, 00000> (oil) Passenger	13	3			4.80	4. 80 4. 60 4. 80	2. 80 2. 78 2. 90	2. 78 2. 78 2. 90	.00	.0	.00	.0

## MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RY.

SINGLE-EXPANSION LOCO- MÓTIVES.												
Class A2, 00>	9	9	37	32								
Switching— First class yards	·				\$4. 25	\$4, 25	\$2,50	\$2, 70	\$0.00	0.0	\$0, 20	8.0
Second class yards.					4.00	4. 25	2.40	2.70	. 25	6.3	. 30	12.5
Class A3, 000>	43	43	58	60								
Over 140,000												
pounds on driv-					4, 25	4, 40	2, 50	2. 75	.15	3, 5	. 25	10.0
Less than 140,000												
pounds on driv- ers					4.00	4, 25	2, 40	2, 70	. 25	6.3	.30	12.5
Class B3, 0000>	35	35	44	56								
Through freight— Chicago division					4.90	4.90	3. 10	3.10	.00	.0	.00	. 0
All other divisions.					4.90	4.90	3.05	3. 10	.00	.0	. 05	1.6
Local freightClass B4, 00000>	71	71	89	81		5. 20		3. 40				
Through freight—												
Chicago division All other divisions					5.05	5. 05	3, 20	3.30	.00	.0	.10	3.1
Superheater en-												
Local freight					5. 05	5. 05	3. 20	3. 30	.00	.0	.10	3. 1
Class B5, 0000000>		1	95	95								
Through freight Local freight					5. 55	5. 55 5. 85	3. 45	3. 75	.00	.0	.30	8. 7
Class C2, O O 00>	77	77	29	26		0.00		1.00				
Passenger— Chicago division					4.30	4.30	2, 40	2, 50	.00	.0	.10	4. 2
All other divisions.					4.30	4.30	2.50	2.50	.00	.0	.00	.0

## MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RY.—Continued.

									*			
		ım-	we:	er- ge ight	mil	per es or to—	day o 10 hou	f 100 irs or	Increas enginee	e to	Increase	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo> Passenger— Chicago division	62	62	56	55	\$4.50	\$4. 50	\$2.80	\$2.85	\$0.00	.0	\$0.05	1.8
All other divisions Class E4, 000000> Through freight—	ii	11	106	106	4.90	4. 90	3. 10	3.10	.00	.0	.00	0.0
125,700 pounds on drivers 290,500 pounds on					5.05	5.05	3. 20	3.30	.00	.0	.10	3.1
driversLocal freight— 125,700 pounds on					5. 55	5. 55	3. 75	3. 75	.00	.0	.00	.0
drivers						5. 40 5. 85		3. 60 4. 05				
Class F2, 00000> Through freight Local freight	15	15	44	44	4. 70	4. 80 5. 10	2.90	2. 90 3. 20	.10	2.1	.00	.0
Class F3, 000000> Passenger— Chicago division	56	56	72	71	4. 50	4. 50	2. 65	2. 85	.00	.0	. 20	7. 0
All other divisions Superheater engines					4. 50 4. 65	4. 50 4. 65	2. 85	2. 85	.00	.0	.00	.0
TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LOCOMOTIVES.												
Class B3, OOOo> Through freight— Chicago division	65	65	63	56	4, 90	5, 05	3. 20	3. 30	.15	3.1	.10	3.1
All other divisions.  Local freight  Class B4, 00000>	.	78	74	81	4, 90	5. 05 5. 40	3. 20	3. 30	.15	3.1	.10	3. 1
Through freight— Chicago division All other divisions.					5. 30 5. 30	5. 30 5. 30	3.30 3.40	3.40	.00	.0	.10	3.0
Superheater enginesLocal freight					5. 30	5. 30 5. 60	3. 75	3.75	.00	.0	.00	.0
Superheater engines Class C3, OOOoo>	5	5	48	55				4. 05				
Passenger— Chicago division All other divisions					4.50 4.50	4. 55 4. 55	2. 85 2. 85	2. 85 2. 85	.05	1.1	.00	.0
Class E3, 00000> Through freight Local freight	10	10	65	65	5. 05	5. 05 5. 40	3. 20	3.30 3.60	.00	.0	.10	3.1
*	-	·	M()	NE	RAL I	RANG	E R.	R.		<u>′</u>	,	-
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> Switching Class A3, OOO>	15	5	57	57	\$4.00		\$2.40					
Switching. Class B3, 000o> Freight	5	7	38	38	4.00	\$4. 25 4. 80	3.00	\$2.70	\$0. 25	6.3	\$0.30	12.5
Class B4, 00000> Freight Class C2, 0000>	. 10	10	91	91	5.30	5. 30	3. 25	3. 25	.00	.0	.00	.0
Passenger Class C3, OOOoo> Switching.	1	1	27	26	4.40	4.40	2. 65	2.65	.00	6.3	.00	.0
	1	1	1	1		1	1	1		1	1	

## MISSOURI & NORTH ARKANSAS R. R.

Class.	Num- ber.		Average weight on drivers (tons).				day of 100 10 hours or		Increase to engineers.		Increase to firemen.	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.  Class B3, OOOo> Passenger Switching. Local freight. Through freight Through freight Switching. Class B4, OOOoo> Local freight Through freight Switching. Class C2, OOoo> Local freight Passenger Class C3, OOOoo> Passenger Local freight Through freight Switching. Class C4, OOOOo> Class C4, OOOOo> Class C4, OOOOo> Class C4, OOOOo> Class C4, OOOOO> Class C4, OOOOO> Work Local freight Through freight Local freight Through freight Through freight	5	5	84 33 55 81	43 84 31 55	4. 13 5. 23 4. 98 5. 38 5. 10 5. 23 4. 28 4. 28 5. 23 4. 98	\$4.40 4.25 5.28 4.98 5.10 4.40 5.28 4.30 4.40 5.98 4.25 5.10 5.10 5.10	\$2.60 2.45 3.27 3.02 3.54 3.29 3.27 2.60 2.60 3.27 3.02 2.70 3.54 3.29	\$2.60 2.70 3.32 3.02 3.59 2.75 3.32 2.60 2.60 3.32 3.02 2.70 3.29 3.29 3.29	\$0.12 .12 .05 .00 .02 .00 .05 .02 .12 .05 .00	2.8 2.9 1.0 .0 0.4 .0 0.5 2.8 1.0 .0	\$0.00 25 05 00 05 00 00 05 00 00 05 00	1.4 .0 1.5 .0 1.5 .0

## MISSOURI, KANSAS & TEXAS LINES.

SINGLE-EXPANSION LOCO-							,					
MOTIVES.												
Class A2, OO>	1	1	29	29	\$4, 25	\$4, 25	\$2.50	\$2,70	\$0.00	0.0	\$0. 20	8.0
Class A3, 000>	35	35	71	71								
Less than 140,000												
pounds on drivers Over 140,000					4. 25	4. 25	2.50	2.70	.00	.0	.20	8.0
pounds on drivers Class B3, 0000>	323	208	58	59	4. 25	4.40	2.50	2.75	.15	3. 5	. 25	10.0
Freight—	020	200		00								
91,400 pounds on drivers					4.95	4.95		2.85	.00	.0		
68,000 to 100,000 pounds on drivers					5. 05	5.05		2.85	.00	.0		
100,000 to 136,200 pounds on drivers	ĺ				5, 20	5, 20		3,00	.00	.0		
Engines, 19-inch cyl- inders and under					0.20	0.20	3. 10	0.00				
Engines, over 19-					*****	*****						
inch cylinders Class B4, 00000>	99	99	80	80			3. 20					
Freight— 108,000 to 137,600												
pounds on drivers 143,200 to 157,000					5. 20	5. 20	3. 25	3. 25	.00	.0	.00	.0
pounds on drivers 195,000 pounds on					5.40	5. 40			.00	.0		
drivers					5.40	5. 40			.00	.0		
143,200 pounds on drivers							3. 30	3.30			.00	.0
157,000 pounds on drivers							3.40	3. 40			.00	.0
195,000 pounds on drivers							3. 55	3, 55			.00	.0
147,300 pounds on drivers							3.75	3, 75			.00	.0
		.,	,,,,,,,,,		.,	,	1 0.10	, 0.10		100000	1 .00	, .0

## MISSOURI, KANSAS & TEXAS LINES-Continued.

	Num- ber.		Average weight on		Rate per day miles or 10 ho less to—			f 100 urs or	Increas		Increase to		
Class.	b	er.	drivers (tons).		Engi	neers.	Fire	men.	engine	ers.	fireme	n.	
	1914	1915	1914	1915	1914	1915	1194	1915	Amount.	Per cent.	Amount.	Per cent.	
SINGLE-EXPANSION LOCO- MOTIVES—continued.													
Class C2, OOoo>	40	40	30	30				•••••					
Less than 80,000 pounds on drivers 80,000 to 100,000			••••	••••	\$4.15	\$4.30	\$2.40	\$2.50	\$0.15	3.6	\$0.10	4.2	
pounds on drivers					4.40	4.40	2.65	2.65	.00	.0	.00	.0	
Class C3, OOOoo>	82	91	56	56					• • • • • • • • •				
Less than 80,000 pounds on drivers 80,000 to 100,000						4.30		2. 50					
pounds on drivers 100,000 to 140,000						4.30		2.55					
pounds on drivers 140,000 pounds or over on drivers		-,			4.40	4.40	2. 65 2. 80	2.65	.00	.0	.00	.0	
	40	70	109	107			2.00				`		
Class E4, 000000> Freight, 200,000 to 250,000 pounds on	40	10	109	101	5. 40	5. 45	3. 75	3. 75	. 05		00		
drivers	7	7	20	20	0.40	0.40	0. 10	3. 13	.05	.9	.00	.0	
Class F2, oOOoo>	1		36	36	4.40	4. 40	2. 65	2. 65	.00	.0	.00	.0	
Class F3, 000000>	27	27	72	73									
Passenger, 140,000 to 170,000 pounds on drivers.					4.40	4. 40	2.80	2: 80	.00	.0	.00	.0	
FOUR-CYLINDER COMPOUND LOCOMOTIVES.					1. 10	4. 10	2:00	2.00	.00	.0	.00		
Class C3. 00000>	2		61								· .		
Passenger, 100,000 to 140,000 pounds on drivers					4.40		2.65						
	1	1	MI	sso	URI	PACIF	IC RY	7.	3	J			
	1	,	1	ı				1					
SINGLE-EXPANSION LOCO- MOTIVES.													
Class A3, 000>	54	53	56	57	 e4 05	PA 40		eo 75	20.15	2 #	en 95	10.0	
First-class yards Second-class yards.	73	70	40	40	\$4. 25 4. 25	\$4.40 4.25	\$2.50 2.50	\$2.75 2.70	<b>\$0.1</b> 5	3.5	\$0. 25 . 20	10. 0 8. 0	
Class B3, OOOo>					5. 05 5. 30	5. 05 5. 35	3. 10 3. 30	3. 10 3. 40	.00	.0	.00	. <b>0</b> 3, 0	
Class B4, 0000o> Through freight— 22 by 30 inch cylin-	206	206	80	80		•••••	•••••	• • • • • •					
ders 19½ by 28-inch cylin-					5.30	5.30	3.55	3.55	.00	.0	.00	.0	
ders 20 by 24 inch cylin-					5.20	5. 20	3.35	3.35	.00	.0	.00	.0	
ders					5.20	5. 20	3.20	3.20	.00	.0	.00	.0	

### MISSOURI PACIFIC RY .- Continued.

Class.		Num- ber.		Average weight on drivers (tons).		Rate per miles or less to—		of 100 urs or men.	Increase to engineers.		Increase to firemen.	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.  Class B4, OOOOo>—Con. Local freight— 22 by 30 inch cylin-												
ders					\$5.55	\$5.60	\$3.75	\$3.85	<b>\$0</b> . 05	0.9	\$0.10	2.7
ders					5.55	5.55	3.55	3, 65	.00	.0	.10	2.8
ders	477	477			5.45	5.50	3.40	3.50	. 05	.9	.10	2.9
Class C2, OOoo> Passenger—  19 by 22 inch cylinders.  18 by 24 inch cylinders.  16 by 24 inch cylinders.  Class C3, OOOoo> Through freight—  19½ by 28 inch cylinders.  20 by 24 inch cylinders.  19 by 24 inch cylinders.  19 by 24 inch cylinders.  Local freight—  19½ by 28 inch cylinders.  20 by 24 inch cylinders.  20 by 24 inch cylinders.  20 by 24 inch cylinders.  20 by 24 inch cylinders.  19 by 24 inch cylinders.	132	132	56	56	4. 40 4. 40 4. 15 5. 20 5. 20 5. 05 5. 55 5. 55 5. 30	4. 40 4. 40 4. 30 5. 20 5. 20 5. 05 5. 05 5. 55 5. 55 5. 35	2. 65 2. 65 2. 40 3. 35 3. 20 3. 10 3. 65 3. 40 3. 30	2. 80 2. 65 2. 50 3. 35 3. 20 3. 10 3. 65 3. 50 3. 40	.00 .00 .15 .00 .00 .00	.0 .0 .0 .0 .0 .0 .0 .0 .0	.15 .00 .10 .00 .00 .00	5.7 .0 4.2 .0 .0 .0
18 by 24 inch cylinders.					0.00	5.35	0.00	3, 40			•10	0.0
Passenger— 20 by 24 inch cylinders. 19 by 26 inch cylinders. Class E4,00000>	45	45	104	105	4. 40 4. 40	4. 40	2. 80 2. 65	2. 80	.00	.0	.00	.0
Through freight		40	104	100	5. 40 5. 65	5. 45 5. 75	3.60	3. 75 4. 05	.05	.9	. 15 . 25	4. 2
Class F2, 00000> Passenger	10	10	59	59	4.40	4. 40	2.80	2.80	.00	.0	.00	
Class F3, 000000>: Passenger	38	38	74	76	4. 40	4.40	2. 80	2.80	.00	.0	.00	.0

#### MORGAN'S LOUISIANA & TEXAS R. R. AND STEAMSHIP CO.

SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, 00>	7	5	29	29					• • • • • • • • • • • • • • • • • • • •			
Switching, first-class yards					\$4.25	\$4.25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8.0
Switching, second-class yards					4.00	4. 25	2.40	2.70	. 25	6.3	.30	12.5
Class A3, 000>:	15	15	71	71								
CoalOil, switching—	9	9	45	45								
First-class yards Second-class yards.					4, 25	4. 40 4. 25	2.50 2.40	2.75 2.70	. 15 . 25	3.5 6.3	. 25	10.5 12.0
become-class yards.		10000			2.00	2. 40	2. 40	1 4 10	. 20	0.3	. 50	12.0

MORGAN'S LOUISIANA & TEXAS R. R. AND STEAMSHIP CO.—Continued.

	Num- ber.		wei	er- ge ight n	Rate mil less	per les or s to—	day o	of 100 urs or	Increas engine		Increase to firemen.	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.											·	
Class A3, OOO>—Contd. Coal, switching—										0.		
First-class yards Second-class yards . Class B3, 000o>:					\$4.25 4.00	\$4.25 4.25	\$2.50 2.40	\$2.70 2.70	\$0.00 .25	0.0 6.3	\$0.20 .30	8.0 12.5
OilCoal	} 5	$\begin{cases} 5\\ 3 \end{cases}$	}73	${76 \atop 74}$								
Freight— Oil Coal.					5.35	5.35 5.35	3.01	3. 05 3. 20	.00	.0	.04	1.3
Class C2, OOoo>: Oil	9 8	9	37 28	37 28								
Branch mixed, oil and coal— Salt Mine branch					4. 40	4. 40			.00	.0		
Lockport branch New Iberia-Mid- land branch					4. 40	4.40			.00	.0		
Alexandria branch. St. Martinsville					4.80	4.80			.00	.0		
branch					4.80	4.80			.00	.0		
Cypremort branch Houma branch Napoleonville					4.80 4.80	4.80 4.80			.00	.0		
branch					4.80 4.65	4.80 4.65	2.85	2. 85	.00	.0	.00	.0
Salt Mine branch Lockport branch Alexandria branch.							2. 40 2. 40 2. 90	2. 40 2. 40 2. 90			.00	.0 .0
Midland branch  Branch mixed, coal— Salt Mine branch							2.65	2.65			.00	.0
St. Martinsville							2. 55 2. 55	2. 55 2. 55			.00	.0
branch Cypremort branch. Houma branch							2.80 2.80 2.80	2.80 2.80 2.80			.00 .00 .00	.0 .0
Napoleon ville branch							2.80	2.80			.00	.0
Baton Rouge branch			52				3. 05 3. 05	3. 05 3. 05			.00	.0
Class F2, 00000>: (oil) Passenger Class F3, 000000>: (oil)	13	1 3	71	53 71	4.40	4.40	2.65	2.65	.00	.0	.00	.0
Passenger					4.80	4.80	2, 90	2.90	.00	.0	.00	.0
		:	NOI	тн	ERN	PACI	FIC R	. R.	,			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, 00> Switching	1	1	29	29	\$4.25	\$4.25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8.0
Class A3, OOO>: Oil	10 160	10 159	75 66	75 67	4 05	4 40	9 50	0 75	15		OF	10.0
Oil, switching Coal, switching				••••	4. 25 4. 25	4.40 4.25	2.50 2.50	2.75 2.70	.15	3.5	. 25 . 20	8.0

#### NORTHERN PACIFIC R. R .- Continued.

	Nu be	ım-	wei	ght	mil	per les or	day o	of 100 urs or	Increas engine		Increas	
Class.				vers	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class A4, 0000> Switching	86	14 87	67	67 43	\$4.25	\$4.25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8.0
100,000 pounds or more on drivers Less than 100,000				••••	5. 05 4. 90	5. 05 4. 90	3.30	3, 30	.00	.0	.00	.0
pounds on drivers Class B4, 00000> Switching.	78	84	75			4.50		2.75				
Freight. Class B5, OOOOOo> Freight.	2	2	66	65	5. 30	5. 30	3.75	3.75	.00	.0	.00	.0
Freight Class C2, O O o o > Passenger— Standard engines,	60	63	30	30								
with 18-inch cyl- inders Standard engines,					4.40	4.40	2.65	2.65	.00	.0	.00	.0
with 17-inch cyl- inders or under Class C3, OOOoo>:					4.40	4.40	2. 55	2.55	.00	.0	.00	.0
Oil	101	104	48 49	48								
100,000 pounds or more on drivers Less than 100,000					4. 55	4. 55	3.05	3.05	.00	.0	.00	.0
pounds on drivers Coal burners, passen- ger—					4.40	4.40	2.85	2.85	.00	.0	.00	.0
100,000 pounds or more on drivers Less than 100,000					4. 55	4. 55	3.05	3.05	.00	.0	.00	.0
pounds on drivers Coal burners, freight— 100,000 pounds on		- • • •			4.40	4.40	2.85	2.85	.00	.0	.00	.0
drivers or more Less than 100,000					5.05	5. 10	3. 30	3.30	.05	1.0	.00	.0
pounds on drivers Class D2, 000> Switching	1	1	17	17	4. 25	5. 05 4. 25	2.50	2.70	.00	.0	.20	8.0
Switching	130	100			5. 15	5. 15	3. 55	3.55	.00	.0	.00	.0
Oil	255	15 255	102 106		5. 30	5.45	3.75	3.75	.15	2.8	.00	.0
Coal burners, freight— 215,000 pounds or												
more on drivers Less than 215,000 pounds on drivers					5. 55 5. 30	5. 55 5. 45	3.75	3.75	.00	2.8	.00	.0
Class F2, 00000> Passenger Class F3, 000000>:	6	6	44	44	4.50	4. 50	3.05	3. 05	.00	.0	.00	.0
Oil. Coal Passenger	2 140	139 	72 71	71 71	4. 65	4.65	3.05	3.05	.00	.0	.00	.0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class B4, 00000>	14	8	90	88	5. 30	5. 30	3.75	3.75	.00		.00	.0

# NORTHERN PACIFIC R. R.—Continued.

		ım- er.	we:	ver- ge ight in	mil	per les or to—	day o	f 100 irs or	Increas engine		Increase fireme	
Class.				ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES—continued.					·				:			
Class C3, OOOoo> Coal burners, freight— 100,000 pounds on	35	35	72	72	•••••							
drivers or more Class E6, 00000000> (Mallet):					5.05	5. 10	3.30	3. 30	\$0.05	1.0	\$0.00	0.0
Oil	9 13	9 13	158 146	158 145			- • • • • •					
more on drivers Less than 275,000					6.30	6. 50	4.00	4.25	.20	3.2	.25	6.3
pounds on drivers Class E 8, 00000 – 00000> (Mallet): Oil Coal	8		200 202	200	6.05	6.05	4.00	4.00	.00	.0	.00	.0
Freight			404		6.30	6.50	4.00	4.25	.20	3.2	.25	6.3
TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LO-COMOTIVES.												
Class B3, OOOo> Freight		19	54	54	5.05	5. 05	3.30	3.30	.00	.0	.00	.0
Class B4, OOOOo> Freight		26	84	84	5.30	5.30	3.75	3.75	.00	.0	.00	.0
Oil	130	128 		58 67	4. 55	4. 55	3. 05	3. 05	.00	.0	.00	.0
ger— 100,000 pounds or more on drivers. Coal burners, freight—					4. 55	4. 55	3. 05	3.05	.00	.0	.00	.0
100,000 pounds or more on drivers. Less than 100,000					5. 05	5. 10	3.30	3.30	. 05	1.0	.00	.0
Class C4, OOOOoo> Freight	4	4	75	75	5. 30	5. 05	3.75	3.75	.00	.0	.00	.0

# OREGON SHORT LINE R. R.

SINGLE-EXPANSION LOCO- MOTIVES.								-				
Class A3, OOO> Switching—	40	45	70	68								•••••
100,800, 129,700,												
140,000 pounds on drivers					\$4.50	\$4.65	\$2.60	\$3.00	\$0.15	3.3	\$0.40	15.4
135,600, 145,000, 150,000 pounds on												
drivers					4.25	4.65	2.50	3.00	. 40	9.4	. 50	20. <b>0</b>
Class B3, 000o>: Oil.	h -	r 3	)	(72								
Coal	17	4	72	72								
Freight					5.05	§5. 05	3. 25	f3. 25	.00	.0	.00	.0
Passenger					1)	(a. 0a	11	(3. 25	)			

OREGON SHORT LINE R. R .- Continued.

•	OR	EGU	) IN E	HU.	RT L	INE F	t. R.—	-Contu	nued.			
		ım- er.	wei o	ght	mil	per es or	day o	f 100 irs or	Increas engine		Increase fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class B4, 00000>	75	80	91	86								
Freight— 154,000 pounds on					0" 00	2 10	00.45	ao ===	00.00	0.0	00.00	0.7
drivers 165,300 pounds on					\$5. 20			\$3.75	\$0.20	3.8	\$0.30	8.7
drivers					5. 40	5. 40	3.45	3.75	.00	.0	.30	8.7
Switching.					5- 40 4- 00	5.40	3.55	3.75	.00	10.0	. 20	5. <b>6</b> 10. <b>0</b>
Work. Class C2, OOoo>	14	15	34	32	5. 00	5. 40	3. 20	3. 75	.40	8.0	. 55	17.1
Passenger				:	4.40 4.80	4.40	2.65 2.95	2.65 2.95	.00	.0	.00	.0
Work. Class C3, OOOoo>:					4.40		2.70					
Oil. Coal.	7 77	777	65	61								
Passenger, coal— 89,900 pounds on												
drivers 103,400 pounds on					4.40	4.65	2.65	2.85	. 25	5.7	. 20	7. 5
drivers					4.65	4.65	2.80	2.85	.00	.0	. 05	1.8
drivers					4.80	4.80	2. 90	2.90	.00	.0	.00	.0
drivers					4. 80 4. 65	4. 80 4. 65	3.00	3.00	.00	.0	.00	.0
89,900 pounds on drivers					4.80	5.05	2.95	3.10	. 25	5. 2	. 15	5.1
103,400 pounds on drivers					5. 05	5. 05	3.10	3.10	.00	.0	.00	.0
132,000 and 140,000 pounds on drivers					5. 05	5.05	3. 25	3. 25	.00	.0	.00	.0
159,000 pounds on drivers					5. 20	5. 20	3. 25	3. 25	.00	.0	.00	.0
Freight, oil— 103,400 pounds on		1			0.20	0.20	0.20	0.20				.0
drivers					5.05	5.05	3.10	3.10	.00	.0	.00	.0
drivers. Work train, coal—					5.05	5.05	3. 25	3. 25	.00	.0	.00	.0
88,000 pounds on drivers					4.40		2.70					
103,400 pounds on drivers					4.65		2.85					
132,000 and 140,000 pounds on drivers.					4.65		3.00					
Work train, oil Class C4, 000000>	7	7	80	80	4.65		3.00					
Freight Switching					5.40	5. 40	3.45 2.50	3.75	.00	.0	.30	8.7
Class E4, o00000> Freight—	50	50	104	104								
205,400 and 206,200 pounds on drivers					5. 40	5. 40	3. 55	3. 55	.00	.0	.00	.0
214,000 pounds on					5. 40	5. 40	3.75	3.75	.00	.0	.00	.0
Passenger	12	12	53	53	4.65	4. 65	2.80	2. 85	.00	.0	. 05	1.8
Class F3, 000000>		34	77	79		5.05		3.10				
Passenger— 141,000 pounds on												
166,900 pounds on	• • • •				4.80	4. 80	3.00	3.00	.00	.0	.00	.0
drivers	J.,,		l	l	5.00	5-00	3.75	3.75	.00	.0	.00	10

# OREGON SHORT LINE R. R.-Continued.

		ım-	wei	er- ge ight	mi		day o		Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class B3, 000o> Freight Class B4, 0000o>	1 26	1 21	72 86	72  83	<b>\$</b> 5. 05	<b>\$</b> 5. <b>0</b> 5	\$3. 25	\$3. 25	\$0.00	0.0	\$0.00	0.0
Freight, 165,300 pounds on drivers					5. 40	5.40	3.45	3.75	.00	.0	.30	8.7

#### OREGON TRUNK LINE RY.

SINGLE-EXPANSION LOCO- MOTIVES.												
Class C3, OOOoo> Passenger	3	3	52	52	<b>\$4.</b> 65	<b>\$4.</b> 65	\$3.05	\$3.05	\$0.00	0.0	\$0.00	0.0

#### OREGON-WASHINGTON R. R. & NAVIGATION CO.

	,		,			,					,	
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO>: Oil	15 15	17 17	67 68	69 69								
Switching— First-class yards Second-class yards. Class B2, OOo>					\$4. 25 4. 25	\$4.40 4.25	\$2.50 2.50	\$2.75 2.70	\$0.15 .00	3.5	<b>\$0.</b> 25 . 20	10. 0 8. 0
Switching	1	1	9	29	4, 25	4, 25	2, 50	2. 70	.00	.0	.20	8.0
Class B3, OOOo>: Oil	4 7	3 7	41 46	44 44								
Freight— Oil burners			40	77	4. 85	4, 85	3. 15	3. 15	.00	.0	.00	.0
Coal burners Switching					4. 85	4, 85 4, 25	3.30 2.50	3. 30 2. 70	.00	.0	.00	8. 0
Class B4, OOOOo>: Oil	5 52	4 53	75 89	87 87								
Freight, oil burners— 117,000 pounds on												
drivers			••••		5. 30	5. 30	3. 20	3. 20	.00	.0	.00	.0
pounds on drivers Freight, coal burners— 117,000 pounds on		••••		****	5. 40	5. 40	3, 30	3.30	.00	.0	.00	.0
drivers		• • • •			5.30	5. 30	3. 35	3.35	.00	.0	.00	.0
pounds on drivers Class C2, OOoo>:					5. 40	5. 40	3. 45	3. 45	.00	.0	.00	.0
Oil Coal	4 22	4 22	23 29	28 28								
Passenger— OilCoal					4. 80 4. 80	4. 80 4. 80	2.80 2.95	2.80 2.95	.00	.0	.00	.0
Freight— Oil					4. 80	4. 80 4. 80	2.80 2.95	2. 80 2. 95	.00	.0	.00	.0
Coal					4, 80	1 2.00	2,90	1 2, 99	.00		.00	.0

# OREGON-WASHINGTON R. R. & NAVIGATION CO.-Continued.

Class.		ım- er.	wei o dri	rer- ge ight n	less	per les or s to—	10 hou	f 100 urs or men.	Increas enginee		Increas fireme	
				ns).				1		Per		Per
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	cent.	Amount.	cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo>: Oil	10 46	10 46	48 63	61 61							,	
Freight, oil burners— 71,000 pounds on drivers					\$4, 85	\$4.85	\$2.90	\$2.90	\$0.00	0.0	\$0.00	0.0
119,000 to 126,000 pounds on drivers Freight, coal burners—					5. 05	5. 05	3.05	3. 05	.00	.0	.00	.0
71,000 pounds on drivers					4.85	4.85	3.05	3.05	.00	.0	.00	.0
119,000 to 126,000 pounds on drivers Passenger—					5.05	5. 05	3.20	3. 20	.00	.0	.00	.0
92,000 pounds on drivers 113,000 pounds on					4. 55	4. 55	2, 80	2, 80	.00	.0	.00	.0
drivers					4. 65 4. 25	4. 65 4. 25	2. 95 2. 50	2. 95 2. 70	.00	.0	.00	. <b>0</b> 8. 0
Class E4, 000000> Freight. Class F2, 00000> (oil)	66	66	103	103	5. 40	5. 45	3.45	3.70	.05	.9	. 25	7. 2
PassengerClass F3, 000000>:					4, 65	4, 65	2.95	2.95	.00	.0	.00	.0
Oil Coal. Passenger	8 14	8 14	71 77	74 74	4. 65	4. 65	2. 95	2, 95	.00	.0	.00	.0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class B4, 00000>:  Oil	8 4	8 4	88 86	87 87								
inch cylinders— Oil Coal					5. 40 5. 40	5. 40 5. 40	3.30 3.45	3.30 3.45	.00	.0	.00	.0
Class C3, OOOoo>:	1 5	1 5	69 69	61 61								
Coal	3	3		197	4, 65	4. 65	2, 95	2. 95	.00	.0	.00	.0
FreightClass F3, 000000> (oil)	4	4	69	74	6.40	6. 50	4. 00	4. 25	.10	1.6	. 25	6. 3
Passenger		••••	••••	• • • •	4. 65	4. 65	2. 95	2. 95	.00	.0	.00	.0
PIE	RRI	E, R	API	D CI	TY &	NOR	THW	ESTE	RN R. R			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class C3, OOOoo> (oil) Passenger Way freight Through freight			57		\$4.50 5.05 4.95	\$4.50 5.05	\$3.05 3.15 2.95	\$3.05 3.15	\$0.00° .00	0.		0.0

# ST. LOUIS, BROWNSVILLE & MEXICO RY.

		ım- er.	wei o	er- ge ight n	mi	per les or	day o	of 100 urs or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO> (oil) Switching Class B4, OOOOo> (oil)			50		\$4.00	\$4.25	\$2.50	\$2.70	\$0.25	6.3	\$0.20	8.0
Through freight. Local freight Class C2, OOoo>:						5. 20 5. 50		3. 15 3. 45				
Wood Oil Passenger—	14	1 15	24 29	26 29								
Wood			55	53	4. 40 4. 15	4. 40 4. 30	2.65 2.40	2.65 2.50	.00 .15	.0 3.6	.00 .10	.0 4.2
Freight— Through— 124,800 pounds									,			
on drivers 98,000 pounds on drivers	• • • •				5. 10 4. 90	5. <b>10</b> 4. 90	3. 05 2. 95	3. 05 2. 95	.00	.0	.00	.0
Local					5. 50 4. 40	5. 50 4. 40	3.30 2.65	3. 30 2. 65	.00	.0	.00	.0

#### ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY.

SINGLE-EXPANSION LOCO-												
MOTIVES.												
Class A3, 000>	97	98	70	70								
Switching— First-class yards					\$4. 25	84 40	80 50	\$2, 75.	\$0.15	3, 5	\$0.25	10.0
Second-class yards						4. 25	\$2.50	2.70	.00	3. 5	20	8.0
Class B4, 00000>	161	160	77	78								
Through freight— 22 by 30 inch cylin-	1			1								
ders					5.30	5, 30	3. 55	3, 55	.00	.0	.00	.0
19½ by 28 inch cylin-			1									
ders 20 by 24 inch cylin-					5. 20	5. 20	3.35	3.35	.00	.0	.00	.0
ders					5, 20	5. 20	3. 20	3.20	.00	.0	.00	.0
Local freight—					}							
22 by 30 inch cylinders					5, 55	5, 60	3. 75	3, 85	. 05	.9	.10	2.7
19½ by 28 inch cylin-					0.00	5.00	0. 10	5.00	.00		.10	2. 1
ders					5. 55	5. 55	3. 55	3.65	.00	. 0	.10	2.8
20 by 24 inch cylin- ders					5, 45	5, 50	3, 40	3, 50	.05	.9	.10	2.9
Class C2, OOoo>	38	38	30	31	0.40		0. 10	0.00			* 10	2.0
Passenger—												
19 by 22 inch cylinders.	1				4.40	4. 40	2.65	2.80	.00	.0	.15	5, 7
18 by 24 inch cylin-				****								
ders 16 by 24 inch cylin-					4. 40	4. 40	2.65	2.65	.00	.0	.00	.0
ders				1	4.15	4.30	2.40	2.50	.15	3.6	.10	4.2
Class C3, OOOoo>	175	175	51	51								
Through freight— 19½ by 28 inch cylin-				İ								
ders					5. 20	5.20	3.35	3.35	.00	.0	.00	.0
20 by 24 inch cylin-		1			w 00	w 00				,	00	
ders 19 by 24 inch cylin-					5. 20	5. 20	3.20	3.20	.00	.0	.00	.0
• ders					5.05	5.05	3.10	3.10	.00	.0	.00	.0
18 by 24 inch cylin-						E 05		2 10				
ders						5. 05		3.10				

# ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY.-Continued.

	Nu be		we	er- ge ight	mi	per les or s to—	day o	of 100 irs or	Increas engine		Increase fireme	
Class.			dri	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C3, OOOoo>—Contd. Local freight— 19½ by 28 inch cylin-												
ders					\$5.55	\$5.55	\$3.55	\$3. 65	\$0.00	0.0	\$0.10	2.8
ders					5. 55	5. 55	3. 40	3. 50	.00	.0	.10	2.9
19 by 24 inch cylin- ders					5.30	5. 35	3.30	3. 40	.05	.9	.10	3.0
ders						5. 35		3. 40				
Passenger— 20 by 24 inch cylin-					4 40	4 40	0.00	0.00	00		00	
ders 19 by 26 inch cylin-					4. 40	4. 40	2.80	2.80	.00	.0	.00	.0
Class C4, OOOOoo> Through freight	19	19	86	86	4. 40	4. 40	2.65	2.65	.00	.0	.00	.0
Local freight					5. 40 5. 65	5. 40	3.60 3.80	3.60	.00	.0	.00	2.6
Class E4, 000000> Through freight	35		105		5. 40	5. 45	3.60	3. 75	.05	9	.15	4.2
Local freightClass F2, oOOoo>		30	59	59	5.65	5. 75	3.80	4.05	. 10	1.8	. 25	6.6
Passenger	22	22	69	70	4.40	4. 40	2.80	2.80	.00	.0	.00	.0
Passenger			104		4. 40	4. 40	2.80	2.80	.00	.0	.00	.0
Passenger			104	104	4. 40	4. 45	2.80	3.00	. 05	1.1	.20	7.1
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class E8,0000000000> Switching	1		207	208	5. 25	5. 40	4.00	4. 00	.15	2.9	.00	.0
								1		1	1	
ST, L	OUIS	5 M.	ERC	HAI	NTS'	BRID	Æ TI	CRMII	NAL RY.	,		
SINGLE-EXPANSION LOCO- MOTIVES.					-							
Class A3, 000>	10	10	46	46	\$4.50	\$4. 75	\$2.65	\$3.00	\$0.25	5. 6	\$0.35	13. 2
	SA	N A	NT	ONI	O & A	RAN	SAS F	ASS ]	RY.	,	,	
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000>	4	4	45	45								
Switching— First-class yards					\$4.25		\$2.50		\$0.00	0.0	\$0.20	8.0
Second-class yards.		39	46	48	4.00	4. 25	2.40	2. 70	. 25	6. 3	. 30	12.5
Class B3, 0000> Switching— First-class yards					4. 25	4, 25	2. 50	2. 70	.00	.0	.20	8.0
Second-class yards. Local freight		••••			4.00	4. 25 5. 55	2.40 3.25	2. 70 3. 25	.25	6.3	.30	12.5
Through freight 2 Work train.					4. 90 4. 90	4. 90	2, 85	2. 85 2. 85	.00	.0	.00	.0
1 Rates for 1915						2. 50	2.00	, 400	.00		.00	

Rates for 1915 effective Oct 15, 1915.
 Through freight is 100 miles, 8 hours or less; passenger is 100 miles, 5 hours or less.

#### SAN ANTONIO & ARANSAS PASS RY .- Continued.

	Num- ber.		ge ight n vers	less	les or s to—	10 hou	irs or			Increas fireme	
1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
		69	71	4.90	4.90	2.85	2.85	\$0.00 .00	0.0	\$0.00 .00	0.0
18	17	29	29								
		40	40	4. 15	4. 30	2. 40	2. 50	.15	3.6	.10	4.2
				4. 40 5. 55 4. 90 4. 90	4. 40 5. 55 4. 90 4. 90	2. 65 3. 25 2. 85 2. 85	2. 65 3. 25 2. 85 2. 85	.00	.0	.00	.0
	1914	1914 1915  - 24 24  - 18 17	Number. we odri (to 1914 1915 1914 24 24 69 18 17 29 9 9 48	ber. drivers (tons).  1914 1915 1914 1915  - 24	Number.   age weight on drivers (tons).   Engine	Number.   age weight on drivers (tons).   Engineers.	Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   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Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   N

#### ST. LOUIS & SAN FRANCISCO R. R.

					DILLY	I Itali	110100		10.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO> Switching	1	1	39	35	\$4.00	\$4. 25	\$2.40	\$2.70	\$0.25	6.3	\$0.30	12.5
Switching— First-class yards			56	60	4. 25	4. 25	2. 50	2.70	.00	.0	.20	8. 0
Second-class yards. Class B3, 0000>	39	21	41	41	4.00	4. 25	2.40	2.70	. 25	6.3	.30	12.5
Freight Class B4, 00000> Freight Switching	254	238	84	88	5.40	5.40	3. 20	3.60	.00	.0	.40	12.5
SwitchingClass C2, OOoo>Passenger—	116	85	33	37		4.40		2.75				
Under 18-inch cyl- inders					4. 15	4.40	2.40	2.65	. 25	6.0	. 25	10. 4
ders Freight Class C3, OOOoo>					4.40	4.40 5.00	2.65	2.65 2.95	.00	.0	.00	.0
Class C3, OOOoo> Freight— Under 20-inch cyl-	346	339	58	65								• • • • •
inders Over 20-inch cylin- ders					5. 00	5. 10	3.10	3.20	.10	2.0	.10	3.2
Passenger Switching					5.10	4. 40 4. 25	3.20	2. 65 2. 70	.00		.00	
Class F3, 000000> Passenger— Under 138,000	60	60	72	75		•••••						• • • • • •
pounds on drivers Over 138,000 pounds on drivers					4.40	4.40	2.65	2.80	.00	.0	.15	5. 7 . 0
FOUR-CYLINDER COMPOUND					4.40	4. 40	2.00	2.00	.00	.0	100	
LOCOMOTIVES. Class C3, OOOoo>	20	20	69	69								
Freight— Under 20-inch cyl- inders					5, 30	5.30	3.35	3, 35	.00	.0	.00	.0
Over 20-inch cylin- ders					5.30	5.30	3.35	3.35	.00	.0	.00	.0

<sup>&</sup>lt;sup>1</sup>Through freight is 100 miles, 8 hours or less; passenger is 100 miles, 5 hours or less.

ST. LOUIS & SAN FRANCISCO R. R.-Continued.

Class.		ım- er.	wei o dri	rer- ge ight n vers ns).	less	per les or s to—	day o	f 100 urs or men.	Increas engine		Increas fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES—contd.  Class E8,00000-00000 (Mallet). Freight  TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LOCOMOTIVES.	7	7	180	180	\$6.40	\$6.50	\$4.00	\$4. 25	\$0.10	1.6	\$0.25	6.3
Class C3, OOOoo>	4	4	63	63	5. 10 5. 10	5. 10 5. 10	3. 20 3. 20	3. 20 3. 20	.00	.0	.00	.0

#### SAN PEDRO, LOS ANGELES & SALT LAKE R. R.

SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO>: Oil	15 1	15 1	70 70	72 72							••••••	• • • • • •
First-class yards Second-class vards					\$4.25 4.25	\$4.40 4.25	\$2.60 2.60	\$2.75 2.70	\$0.15 .00	3.5	<b>\$</b> 0. 15	5. 8 3. 8
Class B4, OOOOo>: Oil	60 24	60		103								•••••
Freight—oil burners— West of Otis	24	24	32	103	5. 40	5. 40	3. 20	3.30	.00	.0	.10	3.1
East of Otis Freight—coal burners Class C2, OOoo>:					5. 40 5. 40	5. 40 5. 40	3.30 3.45	3.30 3.45	.00	.0	.00	.0
Oil	3 11	3 11	33 37	56 56								· · · · · · ·
PassengerClass C3, OOOoo>:	7	7	57	74	4.40	4. 40	2. 65	2. 65	.00	.0	.00	.0
Coal Passenger	1	1	109	74	4.40	4.40	2. 65	2. 65	.00	.0	.00	.0
Class E4, 000000> (oil) Freight Class F2, 00000> (oil)	4	4		84	5. 65	5. 65	3.75	3.75	.00	.0	.00	.0
PassengerClass F3, oOOOoo>:	24	24	72	111	4.40	4.40	2. 65	2. 65	.00	.0	. 00	.0
Coal	8	8		111		•••••			*********			
ers— West of Las Vegas East of Las Vegas			••••		4. 65	4.65	2. 90	2. 90 3. 00	.00	.0	.00	.0
Passenger—coal burn- ers.			00		4. 65	4. 65	3. 75	3. 75	.00	.0	.00	.0
Class Shay		3	63	63	5. 50	5. 50	3. 05	3. 05	.00	.0	.00	.0

# SOUTHERN PACIFIC CO.

Class.	ber.		wei o	er- ge ight n	Rate per d miles or 1 less to—		day o	f 100 irs or	Increas engine		Increase fireme	
Class.				vers ns).	Engi	neers.	Fire	men.			1	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
	178	178	64	73								
Coal Switching— First-class yards	3	3	70	42	\$4, 25	\$4. 25	\$2,50	\$2,50	\$0.00	0.0	\$0,00	0.0
Second-class yards . Class B3, OOOo>: (oil) Passenger—		174	68	68	4.00	4.00	2. 40	2.40	.00	.0	.00	
Over 140,000 pounds on drivers— Valley					4. 40	4. 40	2, 65	2. 65	.00	.0	.00	.0
Mountain (8 milesperhour)					5. 12	5. 12	3. 13	3. 13	.00	.0	.00	.0
18-inch cylinders and over— Valley					4.52	4. 52	2. 65	2. 65	.00	.0	.00	.0
milesperhour) Between Rose-					5.35	5.35	3. 27	3. 27	.00	.0	.00	.0
ville and Truckee Class B4, 0000o>(oil)	307	307	92	92			3.90	3. 90			.00	.0
Passenger— Over 140,000 pounds—												
Valley Mountain (8 milesperhour)					4. 40 5. 12	4. 40 5. 12	2. 65	2. 65 3. 13	.00	.0	.00	.0
18-inch cylindersand over— Valley					4, 52	4, 52	2, 65	2.65	.00	.0	.00	.0
Mountain Class C2, OOoo >(oil) Passenger-	128	128	34	34	5.35	5. 35	3. 27	3. 27	.00	.0	.00	.0
Under 18-inch cyl- inders— Valley					4. 15	4. 15	2. 40	2. 40	.00	.0	.00	.0
Mountain, 18-inch cylinders and over—					4. 90	4. 90	3.00	3.00	.00	.ŏ	.00	.0
Valley  Mountain  Class C3, OOOoo>:					4. 40 5. 12	4. 40 5. 12	2. 65 3. 13	2. 65 3. 13	.00	.0	.00	.0
Oil	246 5	246 5	58 44	58 44								
19-inch cylinders and over— Valley					4. 40	4, 40	2.65	2. 65	.00	.0	.00	.0
Mountain Over 140,000 pounds on drivers—					5. 12	5. 12	3, 13	3. 13	.00	.0	.00	.0
Valley  Mountain  Between Rose-					4. 52 5. 35	4. 52 5. 35	2. 65 3. 27	2. 65 3. 27	.00	.0	.00	.0
ville and Truckee Class C4, OOOOoo> (oil)	33	33	64	64			3.90	3.90			•00	.0
Passenger— 18-inch cylinders and over—	30	00	04	04								
Valley  Mountain					4. 40 5. 12	4. 40 5. 12	2. 65 3. 13	2.65 3.13	.00	.0	.00	.0

# SOUTHERN PACIFIC CO .- Continued.

			,									
		ım- er.	wei	ver- ge ight	Rate mil less	per les or s to—	day o	of 100 ars or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class C4, 000000> (oil)— Continued. Passenger—Continued. Over 140,000 pounds on drivers—					84.50	e4 50		00.05	<b>*0</b> 00	•	20.00	0.0
Vailey					\$4.52 5.35	\$4. 52 5. 35	\$2.65 3.27	\$2.65 3.27	<b>\$0.</b> 00	0.0	<b>\$0.</b> 00	0.0
Class D2, oOO> (oil)	1		11				3.90	3.90			.00	.0
Valley Mountain					4. 40 5. 12		2. 65 3. 13					
Class E3, 00000> (oil) Passenger— Oakland—	1	1	40	40			0. 10					
Under 18-inch cylinders					5. 00	5.00	2.90	2.90	.00	.0	.00	.0
18-inch cylin- ders and over. <b>Por</b> tland—					5. 15	5. 15	2.90	2.90	.00	.0	.00	.0
Under 18-inch eylinders 18-inch eylin-			• • • •		4. 75	4. 75	2. 90	2.90	.00	.0	.00	.0
ders and over. Class E4, 000000> (oil)	53	53	104	103	4. 90	4.90	2.90	2.90	.00	.0	.00	.0
Fassenger— 18-inch cylinders and over—	90	00	104	103								
Valley Mountain Freight —					4. 52 5. 35	4. 52 5. 35	2. 65 3. 27	2. 65 3. 27	.00	.0	.00	.0
Over 140,000 pounds on drivers— Valley					5. 35	5. 35	3. 12	3. 12	.00	.0	.00	.0
Mountain (8 miles per hour)					5. 57	5. 57	3. 40	3, 40	.00	.0	.00	.0
Mountain (10 miles per hour)					5. 97	5. 97	3, 65	3, 65	.00	.0	.00	.0
Class F2, oOOoo > (oil) Passenger—	47	47	5 <b>2</b>	52							.00	
Valley	59	59	72	71	4. 40 5. 12	4. 40 5. 12	2. 65 3. 13	2. 65 3. 13	.00	.0	.00	.0
Passenger— Valley Mountain (8 miles					4. 52	4.52	2.65	2. 65	.00	.0	.00	.0
per hour) Between Roseville					5.35	5.35	3. 27	3. 27	.00	.0	.00	0
and Truckee Class A4,<0000> electric.	1	3	51	60			3.90	3.90			.00	.0
Passenger Freight					4.15 4.80	4.15 4.80			.00	.0		
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class B3, OOOo>:(oil) Freight— Less than 75,000	2	2	72	72								• • • • • • • • • • • • • • • • • • • •
pounds on driv-												
Valley					4. 80 5. 10	4. 80 5. 10	2. 61	2.61	.00	.0	.00	.0
Mountain (10 milesperhour)					5. 50	5.50		3. 22	.00	.0	.00	.0
imito por notar)					0.00	0.00	0. 22	0. 22	. 00			

# SOUTHERN PACIFIC CO .- Continued.

	Num- ber.		Average weight on drivers		mi	per les or s to—	day o	f 100 irs or	Increas engine		Increase	
Class.				ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES—contd.												
Class B3, OOOo> (oil)— Continued. Freight—Continued. 110,000 to 140,000 pounds on driv- ers—												
Valley Mountain (8					\$5.12	\$5.12	\$2.84	\$2.84	\$0.00	0.0	\$0.00	0.0
milesperhour)					5.35	5.35	3. 11	3. 11	00	.0	.00	.0
Mountain (10 milesperhour) Over 140,000 pounds on driv-					5. 73	5. 73	3.36	3.36	.00	.0	.00	.0
ers— Valley					5.35	5.35	2.97	2.97	.00	.0	.00	.0
Mountain (8 milesperhour)					5,57	5.57	3, 25	3, 25	.00	.0	.00	.0
Mountain (10 milesperhour)					5.97	5.97	3.50	3.50	.00	.0	.00	.0
Between Rose-					0.0.	0.0.	0.00	0.00				
ville and Truckee			ļ				3. 75	3. 75			.00	.0
Do Class C3, OOOoo>(oil)	3	3	71	71			4.00	4.00			.00	.0
Freight— Less than 75,000					,							
pounds on drivers—												
Valley Mountain					4.80	4.80	2.61	2.61	.00	.0	.00	.0
(8 miles per hour)					5. 10	5. 10	2.97	2, 97	.00	.0	.00	.0
Mountain					5. 10	0.10	2.01	2.01	.00	••		
(10 miles per hour) <b>75,000</b> to 110,000 pounds on					5. 50	5. 50	3, 22	3, 22	.00	.0	.00	.0
drivers— Valley					4.90	4.90	2.71	2.71	.00	.0	.00	.0
Mountain (8 miles per												
hour) Mountain					5. 10	5. 10	2. 97	2.97	.00	.0	.00	.0
(10 miles per hour)					5. 50	5. 50	3. 22	3. 22	.00	.0	.00	.0
Class E8,00000-00000>	49	49	199	199		0.00	0,22	0.22				
Freight—	10	10	100	100	6, 35	6, 35	4.00	4.00	.00	.0	.00	.0
Valley Mountain (8 miles						6. 57	4, 00	4.00	.00	.0	.00	.0
per hour) Mountain (10 miles					6.57							.0
per hour) Passenger—					6. 97	6. 97	4.00	4.00	.00	.0	.00	
Valley Mountain					5. 52 6. 35	5. 52 6. 35	4.00 4.00	4.00	.00	.0	.00	.0
Class F2, oOOoo> (oil) Freight—	19	19	53	53								
Valley					4. 90	4. 90	2. 71	2. 71	.00	.0	.00	.0
per hour) Mountain (10 miles					5. 10	5. 10	2. 97	2, 97	.00	.0	.00	.0
per hour)		l	J		5.50	5.50	3. 22	3, 22	.00	.0	.00	.0

# SOUTHERN PACIFIC CO.-Continued.

Class.		ım- er.	wei o dri	ver- ge ight in vers ns).	less	per les or s to—	day o	f 100 irs or men.	Increas engine		Increas fireme	
	1914	1915	1914	1915	1914	1915	1914	1915	A mount.	Per cent.	Amount.	Per cent.
FOUR-CYLINDER COMPOUND LOCOMOTIVES—contd.												
Class F6, 0000-00000>	12	12	160	160								
Freight— Valley Mountain (8 miles					\$6.35	\$6.35	\$4.00	\$4.00	\$0.00	0.0	\$0.00	0.0
per hour) Mountain (10 miles					6.57	6.57	4.00	4.00	.00	.0	.00	.0
per hour) Passenger—					6. 97	6.97	4.00	4.00	.00	.0	.00	.0
Valley					5. 52 6. 35	5.52	4.00 4.00	4.00	.00	.0	.00	.0
Mountain  TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LO-COMOTIVES.					0.33	6.35	4.00	4.00	.00	.0	.00	.0
Class B4, 0000o> (oil) Freight—	9	9	87	87								
110,000 to 140,000 pounds on drivers—												
Valley Mountain					5. 12	5. 12	2, 84	2.84	.00	.0	.00	.0
(8 miles per hour) Mountain					5, 33	5. 33	3. 11	3. 11	.00	.0	.00	.0
(10 miles per hour)					5. 73	5.73	3.36	3.36	.00	.0	.00	.0
Over 140,000 pounds on drivers— Valley		1.			5. 35	5. 35	2.97	2.97	.00	.0	.00	.0
Mountain (8 miles per hour)					E 27		3, 25	3. 25		.0		
Mountain (10 miles per			• • • •		5. 57	5. 57			.00		.00	.0
hour) Between Rose- ville and					5. 97	5.97	3. 50	3.50	.00	.0	.00	.0
Truckee							3.75 4.00	3.75 4.00			.00	.0
Class C4, OOOOoo> (oit) Freight— 110,000 to 140,000 pounds on driv-	13	13	69	78								
ers- Valley Mountain (8					5. 12	5. 12	2. 84	2.84	.00	.0	.00	.0
miles per hour)					5. 33	5. 33	3. 11	3. 11	.00	.0	.00	.0
Mountain (10 miles per hour)					5. 73	5. 73	3. 36	3.36	.00	.0	.00	.0
Over 140,000 pounds on drivers— Valley					5, 35	5, 35	2, 97	2, 97	.00	.0	.00	.0
mountain (8 miles per									.00		.00	.0
Mountain (10 miles per			• • • •		5. 57	5. 57	3. 25	3. 25		.0		
hour) Between Rose- ville and					5.97	5. 97	3. 50	3. 50	.00	.0	.00	.0
Truckee							3.75 4.00	3.75 4.00			.00	.0
				}								

#### SPOKANE, PORTLAND & SEATTLE RY.

	SPU	KAI	NE,	PUI	KTLA.	ND &	SEA	TTLE	RY.			
	Number.		wei	er- ge ight	mi	per les or s to—	day o	f 100 irs or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO>	8	8	70	70	\$4.25	\$4.40	\$2.50	\$2.75	\$0.15	3.5	\$0.25	10.0
Class B3, OOOo>	1	1	42	42	4.80	4.80	2.95	2.95	.00	.0	.00	.0
Class B4, OOOOo> Freight	14	14	82	82	5.30	5.30	3.40	3.40	.00	.0	.00	.0
Class C2, OOoo> Passenger	6	6	28	23	4.40	4.40	2. 55	2.55	.00		.00	
Class C3, OOOoo>	17	17	69	69	4.65	4.65	3.05	3.05	.00		.00	.0
Passenger Class E3, 0000o> Freight	15	15	75	75	5.30	5.30	3, 40	3.40	.00		.00	
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class F2, oOOoo> Passenger	10	10	54	54	4. 65	4. 65	3.05	3.05	.00	.0	.00	.0
		ST.	LO	UIS	SOUT	HWE	STER	N RY	•			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, OOO> Switching— First-class yards	8	7	50	50	\$4. 25	\$4, 25	<b>\$2.</b> 50	\$2, 70	\$0.00	0, 0	\$0, 20	8.0
Second-class yards Class B3, 000o>	39	39	59	59	4.00	4. 25	2.40	2. 70	. 25	6.3	.30	12.5
Switching→ First-class yards Second-class yards					4. 25 4. 00	4. 25 4. 25	2. 50 2. 40	2. 70 2. 70	.00	0.0 6.3	.20	8. <b>0</b> 12. 5
140,000 pounds and over on drivers Through freight—						4. 40		2.75		• • • • •		
18 by 24-inch cylin- ders					4.95	4.95	3.05	3.05	.00	0.0	.00	0.0
19 by 26 inch cylindersLocal freight—					5. 20	5, 20	3, 20	3, 20	.00	0.0	.00	0.0
18 by 24 inch cylin- ders					5. 30	5, 30	3, 30	3, 35	.00	0.0	.05	1.5
19 by 26 inch cylinders	24	24	91	90	5. 45	5, 50	3. 45	3, 50	. 05	0.9	. 05	1.4
Through freight— 22 by 28 inch cylin-	24	2/1	31	30					00		00	
ders					5. 40	5. 40	3. 45	3. 45	.00	0.0	.00	0.0
ders 25 by 30 inch cylin-	• • • •	• • • •			5. 40	5. 40	3. 55	3. 55	.00	0.0	.00	0.0
ders					5. 40	5. 40	3. 75	3. 75	.00	0.0	.00	0.0
ders 22 by 30 inch cylin-					5. 65	5. 70	3.70	3. 75	.05	0.9	.05	1.4
inders			• • • •		5. 65	5. 70	3.80	3, 85	. 05	0.9	. 05	1.3
dersClass C2, OOoo>Passenger—	24	25	36	36	5. 65	5. 70	4.00	4. 05	. 05	0.9	.05	1.3
18–19 by 26 inch cyl- inders					4. 40	4. 40	2.65	2. 65	.00	0.0	.00	0.0
17 by 24 inch cylinders					4. 15	4.30 4.95	2. 40 2. 95	2. 50 2. 95	.15	3.6	.10	4. 2 0. 0
Through freightLocal freight					4. 95 5. 30	4. 00	3. 20	2. 30	.00			

ST. LOUIS SOUTHWESTERN RY.—Continued.

	Number.			er- ge ight	mi	per les or s to—	day o	of 100 ars or	Increas engine		Increase fireme		
Class.				vers ns).	Engi	neers.	Fire	men.					
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.	
SINGLE-EXPANSION LOCO- MOTIVES.													
Class C3, OOOoo> Passenger Through freight—	22	21	68	68	\$4. 40	\$4.40	\$2.80	\$2.80	\$0.00	0.0	\$0.00	0.0	
17 by 24 inch cylin- ders					4. 95	4. 95	2.95	2. 95	.00	0.0	.00	0.0	
20 by 26 inch cylinders					5. 20	5. 20	3. 25	3. 25	.00	0.0	.00	0.0	
ders				••••	5. 30	5. 30	3.40	3. 40	.00	0.0	.00	0.0	
ders 20 by 26 inch cylin-					5. 30	5. 30	3. 20	3. 20	.00	0.0	.00	0.0	
ders		••••	••••		5. 55	5. 55	3.50	3.50	.00	0.0	.00	0.0	
dersClass F2, oOOoo>	6	6	46	46	5. 55		3. 66						
Passenger					4.40	4. 40	2.65	2.65	.00	0.0	.00	0.0	
TACOMA EASTERN R. R.													
SINGLE-EXPANSION LOCO-													
Class B4, 0000o> (oil) Switching Through freight	5	4	52	78	\$5.30 5.45		\$2.85 3.35						
Local freight	5	5	58	50	5.65		3.40						
Passenger					4. 55 5. 25 5. 45	4. 55 5. 30 5. 50	\$2.95 3.20 3.35	\$2.95 3.25 3.40	\$0.00 .05 .05	0.0 1.0 .9	\$0.00 .05 .05	0. 0 1. 6 1. 5	
TERMI	NAI	R	AIL	ROA	D AS	SOCI	ATION	1 OF	ST. LOU	IS.			
SINGLE-EXPANSION LOCO-													
Class A3, 000>	109	109	71	71		11721							
Switching. Class B3, 000o>	3	3	42	42	\$4.50	\$4.75	\$2.65	\$3.00	\$0.25	5.6	\$0.35	13. 2	
Switching	ctive	Oct	. 15.	1915	4.50	4.75	2.65	3.00	, 20	3.0	.35	15. 2	
			,		NEW	ORLI	EANS	R. R.					
SINGLE-EXPANSION LOCO-													
Class A2, OO> (oil)	1	1	26	26									
First-class yards Second-class yards. Class A3, 000>:					\$4.25 4.00	\$4. 25 4. 25	\$2.50 2.40	\$2.70 2.70	\$0.00 .25	0. 0 6. 3	<b>\$0.20</b>	8. <b>0</b> 12. 5	
Oil	20	20 4	63 57	63 57									
First-class yards Second-class yards.					4. 25 4. 00	4.40 4.25	2.50 2.40	2.75 2.70	. 15 . 25	3.5 6.3	. 25	10.0 12.5	
Coal, switching— First-class yards Second-class yards.					4.25	4.25 4.25	2.50 2.40	2.70 2.70	.00	6.3	.20	8. 0 12. 5	
	, ,				,						,		

TEXAS & NEW ORLEANS R. R.-Continued.

Rate per day of 100 miles or 10 hours or less to— longineers.   Increase to engineers.   Increase to engineers.	Aver- Rate per day of 100													
Class   Ctons   Engineers   Firemen														
SINGLE-EXPANSION LOCO-MOTIVES—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-Motives—continued.   Single-Expansion Loco-M	Class.													
MOTIVES—continued. Class C2, OOoo>: Oil.														
Oil. 8 9 35 34														
Oil—Branch mixed—  Rusk branch. \$4.40 \$4.40 \$2.40 \$2.40 \$0.00 0.0 \$0.00 0.0  Clinton branch passen- ger— ger—	Oil. Coal													
ger—	Oil—Branch mixed— Rusk branch Clinton branch													
Less than 18-inch cylinders	ger— Less than 18-inch													
Cylinders 18 inches and over	Cylinders 18 inches and over													
Less than 18-inch cylinders	Less than 18-inch cylinders Cylinders 18 inches													
and over	Coal—Branch mixed Class C3, OOOoo>													
Branch freight	Class F2, 00000> (oil)													
Class F3, 0 O O O O O (oil)	Class F3, oŏOOoo> (oil) Passenger													
FOUR-CYLINDER COMPOUND LOCOMOTIVES.  Class F2.0000>(oil) 3 55 55	LOCOMOTIVES.													
Class F2, 0 O O o o > (oil) 3 3 55 55 4.60 4.60 2.78 2.78 0 0 0 0 0 0 0	Passenger													

#### TEXAS & PACIFIC RY.

9	9	20	44								
36	37	44	44								
								\$0.00	0.0	\$0.00	0.0
		0.5	0.5	4.00	4.00	2,40	2.40	.00		.00	.0
18	18	35	35								
				4.25	4. 25	2.50	2.50	.00	.0	.00	.0
10	10	91	91								0
				5.40	5.40	3.65 3.75	3.65	.00	.0	.00	.0
72	69	25	26								
				4.15	4.30	2.40	2.50	.15	3.6	.10	4.2
				4.40	4.40	2.65	2.65	.00	.0	.00	.0
				4.95	4.95			.00	.0		
						3.00	3.00			.00	.0
				5.30	5.30			.00	.0		
						3.30	3.30			.00	0
	10 72	36 37 2 2 18 18 10 10 72 69	36 37 44 2 2 35 18 18 35 10 10 91 72 69 25	2 2 35 35 18 18 35 35 10 10 10 91 91 72 69 25 26	36 37 44 44	36     37     44     44         \$4.25     \$4.25         4.00     4.00       2     2     35     35          4.25     4.25       4.00     4.00     4.00       10     10     91     91        5.40     5.40        5.75     5.75       72     69     25     26        4.15     4.30        4.40     4.40        4.95     4.95	36   37   44   44     \$4.25   \$4.25   \$2.50	36       37       44       44           \$4.25       \$4.25       \$2.50       \$2.50           4.00       4.00       2.40       2.40         2       2       35       35             4.25       4.25       2.50       2.50           4.00       4.00       2.40       2.40         10       10       91       91        5.40       3.65       3.65       3.65         72       69       25       26        5.75       5.75       3.75       3.75           4.45       4.40       2.40       2.50           4.40       4.40       2.65       2.65           4.95       4.95       3.00       3.00            3.00       3.00	36   37   44   44     \$4.25   \$4.25   \$2.50   \$2.50   \$2.50   \$0.00   .00	36   37   44   44     \$4.25   \$4.25   \$2.50   \$2.50   \$0.00   0.0   .0   .0   .0   .0   .0	36       37       44       44            \$4.25       \$4.25       \$2.50       \$2.50       \$0.00       0.0       \$0.00

TEXAS & PACIFIC RY .- Continued.

Class.	Nu be	ım- er.	wei o dri	rer- ge ight on vers ns).	less	per les or s to—	day o	of 100 urs or men.	Increas engine		Increase fireme	
			(10)		Engi	neers.	THE.	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
( lass C3, OOOoo> Passenger—	249	250	56	57								
Under 18-inch cyl- inders					04 15	C4 15	\$2.40	89.40	\$0.00	0.0	\$0.00	0.0
18-inch cylinders or under 20-inch cyl-					\$4.15	\$4.15	52.40	Ø2.40	\$0.00	0.0	\$0.00	0.0
inders					4.40 4.55	4.40 4.55	2.65 2.80	2.65 2.80	.00	.0	.00	.0
21-inch cylinders Through freight—							2.90	2.90			.00	.0
19-in cheylinders and under (10-												
wheel) Over 19-inch cylin-					5.05	5.05			.00	.0		
ders. 22-inch cylinders					5.20	5. 20			.00	.0		
and over Local freight—					5.40	5.40			.00	. 0		
Under 20-inch cyl- inders					5.30	5.30			.00	.0		
20-men cymiders					5. 55	5. 55			.00	.0		
and over					5. 75	5. 75			.00	.0		
18-inch cylinders or under—												
Through freight Local freight							3.00	3.00			.00	.0
19-inch cylinders— Through freight							3.15	3.15			.00	.0
Local freight 20-inch cylinders—							3.45	3.45			.00	.0
Through freight Local freight							3.35	3.35			.00	.0
22-inch cylinders— Through freight							3.55	3.55			.00	.0
Local freight 22-inch cylinders		• • • •	• • • •				3.75	3.85			.10	2.7
(consolidation)— Through freight								3.65				
Local freight Class F2, 00000>	2	2		58	4.40	4.40	2.80	3.95	.00	. 0	.00	
Passenger				• • • • •	4,40	4.40	2.00	2. 80	.00	.0	.00	
_	,	TRI	NIT	Y &	BRA	zos v	ALLI	EY RY	۲.		,	
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000> (oil) Switching.	2	2	69	69	<b>\$</b> 4, 25	\$4, 25	\$2.50	\$2, 70	\$0.00	0.0	\$0. 20	8.0
Class B3, OOOo>:	2	2	44	44	<b>\$1,20</b>	1, 20			\$0.50	0.0	20.30	
Coal	1	ĩ	44	44	4. 40	4.40	2, 55	2. 55	. 00	.0	.00	
Class B4, 00000>	34	34	68	68	5.55	5.55	3. 45	3. 45	.00	.0	.00	.0
FreightClass C2, OOoo> (oil)	3	3	30	29	5.55	5.55	3. 45	3. 45	.00	. 0	.00	.0
Passenger	16	16	61	62	4.40	4. 40	2. 55	2.55	.00	. 0	.00	
Passenger					4. 40 5. 55	4. 40 5. 55	2. 65 3. 45	2, 65 3, 45	.00	.0	.00	.0

# UNION PACIFIC R. R.

	UNION FACIFIC A, A,													
		ım- er.	wei o	er- ge ight n	mi	per les or s to—	day o 10 hou	of 100 urs or	Increas engine	e to	Increase fireme			
Class.			dri (to	vers ns).	Engi	neers.	Fire	men.						
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.		
SINGLE-EXPANSION LOCO- MOTIVES.									,					
Class A3, 000> Switching— 18 by 26 inch cylin-	109	109	63	65		••••						•••••		
ders					\$4.25	<b>\$</b> 4. 25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8.0		
19 by 26 inch cylinders			- ; ; -		4.25	4.40	2.50	2.75	.15	.3.5	.25	10.0		
Class B3, OOOo> Freight— 18 by 26 inch cylin-	2	.2	48	49		•••••			**********					
class B4, OOOOo>	216	223	92	92	4. 55	4.80	3.00	3.00	. 25	5. 5	.00	.0		
Freight— 21 by 30 inch cylin- ders					5. 40	5. 40	3. 55	3. 55	.00	.0	.00	.0		
21 by 28 inch cylinders			• • • •		5. 30	5. 30	3, 55	3.55	.00	.0	.00	.0		
22 by 30 inch cylinders			••••		5. 40	5. 40	3. 55	3. 55	.00	.0	.00	.0		
20 by 24 inch cylinders					5.10	5. 10	3.30	3.30	.00	.0	.00	.0		
Switching— 21 by 28 inch cylin-			•					0.00						
class C2, OOoo>	44	45	32	32		4.40		2.75						
Passenger— 18 by 26 inch cylin-														
ders Freight—		••••	••••	••••	4.40	4.40	2.65	2. 65	.00	.0	.00	.0		
18 by 26 inch cylin- ders					4.75	4.75	3.00	3.00	.00	.0	.00	.0		
Class C3, OOOoo>	120	131	58	60		• • • • • •								
18 by 24 inch cylinders					4. 40	4. 40	2, 65	2, 65	.00	.0	.00	.0		
19 by 24 inch cylinders 20 by 24 inch cylin-					4.50	4. 50	2, 80	2, 80	.00	.0	.00	.0		
ders20 by 28 inch cylin-					4.50	4.50	2, 80	2, 80	.00	. 0	.00	.0		
ders					4. 65	4, 65	2.90	2.90	.00	.0	.00	.0		
18 by 24 inch cylinders					4. 75	4.75	3.00	3.00	.00	.0	.00	.0		
19 by 24 inch cylinders.					4. 90	4. 90	3. 15	3.15	.00	.0	.00	.0		
67 tons on drivers, 20 by 28 inch cyl-			• • • •		1. 30	1. 50	0.10	5.10			.00			
inders20 by 24 inch cylin-					5. 05	5. 05	3. 25	3. 25	.00	.0	.00	.0		
ders					4.90	4.90	3. 15	3.15	.00	.0	.00	.0		
20 by 28 inch cyl- inders Switching—					5. 05	5. 05	3.30	3.30	.00	.0	.00	.0		
18 by 24 inch cyl- inders					4, 25	4. 25	2, 50	2. 70	.00	.0	.20	8.0		
Class C4, OOOOoo> Freight—	8	8	83	83										
21 by 30 inch cylinders			105	107	5. 40	5. 40	3. 55	3. 55	.00	.0	.00	.0		
Class E4, 000000> Freight—	95	110	105	105					••••			•••••		
23 <sup>2</sup> / <sub>4</sub> by 30 inch cyl- inders					5. 40	5. 45	3.55	3. 70	. 05	.9	.15	4.2		
ders				l	5. 40	5. 45	3.75	3.75	. 05	.9	.00	.0		

#### UNION PACIFIC R. R.-Continued.

		ım-	wei	ver- ge ight in	Rate	per les or s to—	day o	f 100 irs or	Increas engine		Increas fireme	
Class.				ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class E4, 000000>—Con. Passenger— 26 by 28 inch cylin-					er 00	e= 00	en 75	<b>\$</b> 3. 75	\$0.00	0.0	\$0.00	0.0
ders	20	20	53	53		\$5,00						0.0
ders Class F3, 000000> Passenger— 22 by 28 inch cylin-	80	100	70	76	4. 50	4. 50	2. 90	2.90	.00	.0	.00	.0
ders			••••		4. 65	4. 65 4. 65	3.00	3.00	.00	.0	.00	.0
FOUR-CYLINDER COMPOUND LOCOMOTIVES.												
Class B4, 00000> Freight— 15½-26 by 30 inch	59	55	82	82								
cylinders	32	23	72	72	5. 40	5. 40 5. 40	3. 55	3. 55	.00	.0	.00	.0
Passenger— 15½-26 by 28 inch cylinders					4. 65	4. 65	2, 90	2. 90	.00	.0	.00	.0
Freight—	15	15	55	55	5. 05	5. 05	3. 25	3. 25	.00	.0	.00	.0
Passenger— 16-27 by 28 inch cylinders Class E8,00000-00000>	3	3	147	147	4. 50	4. 50	2.90	2.90	.00	.0	.00	.0
Freight— 26-40 by 30 inch cylinders			••••	••••	6. 40	6. 50	4.00	4. 25	.10	1.6	. 25	6.3
	Ţ	UNIC	ON S	STO	CK Y.	ARDS	OF C	МАН	Α.			
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A3, 000>: Switching	{ 3 6	3 6	60 59	62 59	\$4. 25	\$4. 25	\$2.50	\$2.70	\$0.00	0.0	\$0.20	8.0
	1	,	-	1	WABA	SH R	. R.		1		1	
SINGLE-EXPANSION LOCO- MOTIVES.												
Class A2, OO>		14	30	32	\$4. 25		<b>\$2.</b> 50	\$2.70	\$0.00	0.0	\$0.20	8.0
Second-class yards Class A3, 000> Switching— First-class yards		99	64	64		4. 25	2, 40	2. 70	.25	6.3	.30	12.5
First-class yards Second-class yards					4.00	4. 40	2.40	2. 75			.35	14, 6

WABASH R. R.-Continued.

			1		1							
		ım- er.	we:	er- ge ight	mi	per les or s to—	day o	of 100 ars or	Increas engine		Increas fireme	
Class.				vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCO- MOTIVES—continued.												
Class B3, OOOo> Freight Switching—	119	135	59	59	\$5.05	\$5.05	\$3, 15	\$3.15	\$0.00	0.0	\$0 00	0.0
First-class yards Second-class yards Class B4, 00000>	49	49	90	90	4. 25 4. 00	4, 40 4, 25	2. 50 2. 40	2. 75 2. 70	.15 .25	3. 5 6. 3	.25 .30	10, 0 12, 5
Freight— 119,000 pounds on drivers					5. 30	5. 30	3.30	3.30	.00	.0	.00	.0
154,500 pounds on drivers 198,600 pounds on					5. 30	5, 30	3.30	3.30	.00	0	.00	.0
drivers Class C2, OOoo> Passenger—	72	70	31	31	5. 30	5. 30	3. 45	3.45	.00	.0	.00	
46,000–61,000 pounds on drivers 79,505 pounds on					4.15	4. 30	2.40	2.50	.15	3.6	.10	4.2
drivers Freight— 55,000–60,800 pounds		••••		••••	4. 40	4.40	2, 65 2, 85	2.65	.00	.0	.00	.0
on drivers	110	110			4. 90	4. 90 4. 90	2. 50	2.85	.00	.0	.00	
Class C3, OOOoo> Passenger Freight— 75,000 pounds on	113	112	46	41	4. 40	4.40	2. 65	2. 65	.00	.0	.00	.0
drivers		• • • •	••••		5. 05	4. 90 5. 05	3.15	2.90 3.15	. 00	0	.00	
Class E3, 00000>	90	90	75	75	5. 30	5.30	3.30	3.30	.00	.0	.00	.0
Class E4, 000000> Freight. Class F2, 00000>	63 33	63	102 48	103 48	5.30	5. 45	3.75	3.75	.15	4.7	.00	.0
Passenger Class F3, 000000> Passenger	16	16	75	75	4, 40	4, 40	2, 65 2, 80	2, 65	.00	.0	.00	.0
TWO-CYLINDER COMPOUND OR CROSS-COMPOUND LO-COMOTIVES.												
Class B3, OOOo> FreightClass C3, OOOoo>	26 6	10 5	64	64	5, 05	5.05	3.15	3.15	.00		.00	
Freight 1,05,525-128,512 pounds on drivers		••••	••••	••••	5.05	5. 05	3. 15	3.15	.00	.0	.00	.0
WEATHER	FO	RD,	MIN	ER.	AL W	ELLS	& N(	ORTH	WESTER	N RY		
SINGLE-EXPANSION LOCO- MOTIVES,												
Class B4, 00000>	1	1	65	66	\$4.33	\$5.15	\$2.83	\$3.30	<b>\$0.</b> 82	18. 9	\$0.47	16.6
Class C2, OOoo> Passenger Class C3, OOOoo> Freight	1	2 1	38	29	4.30	4, 30 5, 15	2.50	2.50	.00	.0	.00	.0
							233	3.03	. 52			

# WESTERN PACIFIC RY.

		ım-	we.	ver- ge ight	mi	per les or s to—	day o	of 100 urs or	Increas engine		Increas fireme	
Class.			dri	vers ns).	Engi	neers.	Fire	men.				
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.	Amount.	Per cent.
SINGLE-EXPANSION LOCU-												
Class A3, 000>	12	12	73	73								
First-class yards— Oil Coal					\$4. 25 4. 25	\$4. 40 4. 40	\$2.50 2.50	\$2.75 2.75	\$0.15 .15	3. 5 3. 5	<b>\$0.</b> 25	10. ( 10. (
Second-class yards— Oil Class B4, 00000> Oil		54	92	92	4. 00	4. 40	2.40	2. 75	. 40	10. 9	. 35	14. (
Coal. Passenger (oil) Freight—	10	11	93	93	4. 90	4. 90	3. 15	3. 15	.00	.0	.00	. (
Öil					5. 40 5. 40	5. 40 5. 40	3. 40 3. 55	3. 40 3. 55	.00	.0	.00	:
Oil. Coal. Passenger—		31 7	66 74	66 68							• • • • • • • • • • •	
Oil Coal Freight (oil)					4. 65 4. 65 4. 90	4. 65 4. 65 4. 90	3. 00 3. 00 2. 85	3. 00 3. 00 2. 85	.00	.0	.00	.(
	1	·	W	ICH:	ITA V	ALLE	EYRY	Y.				
SINGLE-EXPANSION LOCO-												
Class B3, OOOo> Through freight	8	8	46	46		\$5.05	<b>\$</b> 3. 10	\$3.10	\$0.00	0.0	\$0.00	0.0
Local freight  Class B4, 00000>  Through freight	2	2	58	58	5. 55	5. 55	3. 30	3. 40	.00	.0	.10	3.(
Local freight  Class C2, O Ooo>  Passenger	5	1	25	24	5. 65 4. 40	5. 65 4. 40	3. 40 2. 50	3. 50 2. 50	.00	.0	.10	2.9
WYOMING & NORTHWESTERN RY.												
SINGLE-EXPANSION LOCO- MOTIVES.												
Class C2, OOoo (oil) Passenger	1	2	28	28	\$4.20	\$4.30	\$2.65	<b>\$2.65</b>	\$0.10	2.4	\$0.00	0.0
Class F3, 000000> Freight	4	4	55	55	5. 20	5. 20	3.30	3.30	.00	.0	.00	

# YAZOO & MISSISSIPPI VALLEY R. R.

Class.		ım- er.			Rate per miles or less to—  Engineers.		day of 100 10 hours or		Increase to engineers.	
	1914	1915	1914	1915	1914	1915	1914	1915	Amount.	Per cent.
SINGLE-EXPANSION LOCOMOTIVES.										
Class A2, 00> Switching Class A3, 000>		1	36 55	36 57	\$4. 00	\$4. 25	(1) (1)	(1) (1)	<b>\$</b> 0. 25	6.3
Switching— First-class yards Second-class yards Class B3, OOOO>		42	52	52	4. 25 4. 00	4. 40 4. 25	(1) (1)	(1) (1)	.15 .25	3.5 6.3
Freight— 18-inch cylinders or over. Under 18-inch cylinders Branch line					5. 15 4. 90 4. 65	5. 15 4. 90	(1) (1) (1)	(1) (1) (1)	.00	.0
Class B4, 00000> Freight—  B-inch cylinders or over.  Under 18-inch cylinders.  Branch line.  Class C2, 0000>					5. 15 4. 90 4. 65	5. 15	(1) (1) (1)	(1) (1) (1) (1)	.00	.0
Passenger— Less than 18-inch cylinders. 18-inch cylinders or over. Freight—					4. 15 4. 40	4.30 4.40	(1) (1)	(1) (1)	.15	3.6
Less than 18-inch cylinders.  18-inch cylinders or over.  Branch line  Class C3, 0000>	1			1	4. 90 5. 15 4. 65	4. 90 5. 15	(1) (1) (1)	(1) (1) (1)	.00	.0
Passenger— Less than 18-inch cylinders. 18-inch cylinders or over					4. 15 4. 40	4.30 4.40	(1) (1)	(1) (1)	.15	3.6
Freight— 18-inch cylinders or over Under 18-inch cylinders. Branch line					5. 15 4. 90 4. 65	5. 15 4. 90	(1) (1) (1)	(1) (1) (1)	.00	.0

<sup>1</sup> No contract with firemen.

# XXIV.

# GEORGIA RAILROAD AND THE ORDER OF RAILROAD CONDUCTORS AND BROTHERHOOD OF RAILROAD TRAINMEN.

The controversy which resulted in the arbitration proceedings reviewed in this section was precipitated by the discharge of J. T. Paschal, a conductor, and A. M. Morgan, a flagman, from the service of the Georgia Railroad Co., in 1912. The offense attributed to Mr. Paschal and made the basis of his dismissal was his alleged violation of rules promulgated by the railroad respecting the observance of the law limiting the hours of continuous service of train crews. It was charged against the employee Morgan that he had made an error in an expense account submitted in connection with his attendance upon court in a case involving the company's interests. The reinstatement of these employees was demanded by the Order of Railroad Conductors and Brotherhood of Railroad Trainmen, and the company refusing to comply with these requests, the controversy by mutual agreement was submitted to arbitration.

The members of the board of arbitration selected in this controversy were W. L. Chambers, chairman; Charles A. Wickersham, selected by the company; and Frederick A. Burgess, selected by the employees. The proceedings of the board were conducted at Atlanta, Ga., extending from November 7 to November 26, 1912, inclusive.

#### FINDINGS OF THE BOARD OF ARBITRATION.

Upon consideration of the evidence the board of arbitration ordered the reinstatement of the conductor, Paschal, to his former position with seniority rights as of date of his discharge, with pay from that date. With respect to the flagman, Morgan, the board found that a suspension of 10 days would have been adequate discipline for the offense committed by this employee, and ordered that he be rein-

stated with a deduction from his pay accordingly.

It was shown by the testimony presented to the board that Conductor Paschal at the time of his alleged offense had been in the service of the Georgia Railroad for a period of 19 years and 7 months, approximately 13 years of this service having been in the capacity of con-On May 18, 1912, while acting as such conductor, Mr. Paschal left Convers, Ga., in charge of the second section of train No. 13 and proceeded westward toward Atlanta. The engineer of Paschal's train, upon leaving Convers, lacked but 12 minutes of having completed 16 hours of continuous service. In order to reach the next railroad station at Lithonia, Ga., within 12 minutes after leaving Convers, it was essential that the trip should be made in 2 minutes and 24 seconds less than the time required for the trip at the speed to which the train was limited by schedule. Upon approaching Lithonia Mr. Paschal found the east switch at this station occupied by the first section of train No. 13, a few of the cars extending over the switch upon the main line. When the first section had passed the station Mr. Paschal placed his train on the siding, went off duty, and reported

to the dispatcher, his report being made 10 minutes after the expiration of his engineer's time limit under the 16-hour law. Mr. Paschal contended that the run from Conyers to Lithonia would have been completed within 12 minutes but for the delay consequent upon overtaking the first section of the train.

The railroad company contended that the conductor, in starting his train from Lithonia when only 12 minutes remained until his engineer's period of duty would reach 16 hours, had violated a rule

issued by the company in November, 1911, as follows:

Engineers and firemen, conductors and trainmen, to comply with the hours-ofservice law, the period of duty should be computed from the time the employee actually goes on duty to the time he is relieved of his engine or train. If a train be caught without instructions on main line at any point by the expiration of the 16hour period, the crew will place train in sidetrack, go off duty, and report action to dispatcher.

By permission of the board of arbitration the employees introduced testimony which tended to show conclusively that the speed limit was continuously and habitually disregarded by all engineers and trainmen, especially in freight service, with the knowledge, consent, and approval of the officials of the road. It was shown by the testimony of numerous witnesses that the run between Conyers and Lithonia could be made under normal conditions within 12 minutes, some of the witnesses testifying that the run could be made in as short a time as 10 minutes.

The board in its decision held that the bulletin of November 14, 1911, had been interpreted by the trainmen substantially in accordance with the interpretation placed upon it by the officers of the road and that the language of the bulletin itself was susceptible of

such construction.

In ordering the reinstatement of Mr. Paschal the board, in the concluding paragraph of the award, states that it is the duty of employees of the company to obey the rules and bulletins in accordance with the interpretation given them by the management of the

railroad.

The award with respect to Conductor Paschal was concurred in by arbitrators Chambers and Burgess, arbitrator Wickersham dissenting. Mr. Wickersham held that the conductor had been guilty of disobedience to instructions involving a violation of the law, the effect of which, Mr. Wickersham pointed out, was to subject the railroad company to a penalty. Mr. Wickersham declared that he found it difficult to form a satisfactory opinion as to what would be fair and reasonable in the case, but held that the original penalty was too severe, and expressed the opinion that a suspension of 30 days would have been proper when the management first undertook to deal with the conductor, provided that Mr. Paschal had admitted to the management that he had violated his instructions.

In announcing its award in the case of the flagman, Morgan, the board of arbitration, after pointing out that the error made by this employee in his expense account had been corrected when his attention was called to it, and that the railroad authorities had the right to administer some discipline, expressed the opinion that a suspension of 10 days would have been adequate discipline, the error in question having constituted the employee's first offense, and ordered his reinstatement, with a deduction from pay accordingly. The board was unanimous in its decision with respect to this employee.

# XXV.

# NORFOLK & WESTERN RAILROAD AND ITS MAINTENANCE-OF-WAY EMPLOYEES.

In 1913 a controversy between the Norfolk & Western Railway Co. and its maintenance-of-way employees relating to requests of these employees for an increase in rates of pay was submitted to arbitration.

In this case the controversy involved a class of employees who were not included within the scope of the Federal statute governing the arbitration of certain classes of railway labor disputes, the act then in force having applied only to employees actually engaged in the operation of trains. The parties, therefore, proceeded independently of the Federal statute, although adhering in most respects to the procedure prescribed for controversies falling within the scope of the act.

#### DEMANDS OF THE EMPLOYEES.

A review of the official record of the proceedings shows that representatives of the employees in 1913 presented to the railway company a scale of wages agreed upon at a meeting of representatives of maintenance-of-way employees of various roads, in Birmingham, Ala., in January, 1913, for presentation to all of the railroads in southern territory. Upon examination of the proposed wage scale, the company held that it would involve large increases in actual wages and refused to consider the adoption of such scale, but notified the men that it would consider a revision of regulations in regard to this class of labor and some incidental increases in rates of pay which were considered appropriate. A series of conferences was thereupon held between representatives of the company and the employees, resulting in certain incidental concessions to the employees and an agreement to submit the question of an increase in wages to arbitration.

Stipulations for the arbitration were agreed to May 24, 1910, the railway company selecting as arbitrator G. M. Merrell, of Roanoke, Va., and the employees selecting A. B. Lowe, of Detroit, Mich. By agreement between these arbitrators the appointment of a third member of the board was referred to former United States Commissioner of Labor, Charles P. Neil, who appointed as such arbitrator

W. L. Chambers, of the District of Columbia.

The arbitration agreement stipulated in part that the representatives of the maintenance-of-way employees should present to the board of arbitration the wage proposition prepared in Birmingham, Ala., as the basis of their claim for wages and that the railroad company should present its existing scale of wages and the concessions previously made in conference as a fair and just settlement of the demands of the employees.

# AWARD OF THE BOARD OF ARBITRATION.

The board of arbitration was organized at Roanoke, Va., with Judge Chambers as chairman. The proceedings commenced on Monday, June 30, 1910, and were brought to a conclusion on the

following Wednesday, when the board announced its award.

As pointed out in detail below, the findings of the arbitration board were productive of a general increase in the rates of pay in effect before the award, this increase in the case of employees paid on a monthly wage basis ranging from \$2 to \$2.50 per month. In the case of employees paid at hourly rates the prevailing increase in the wage scale was an advance of 1 cent per hour, the equivalent increases on a percentage basis ranging from 2.7 to 6.7 per cent. Concessions were also made to certain classes of employees in the form of increases in rates of extra compensation allowed by the company for work in certain localities and occupations.

# APPLICATION OF THE AWARD.

In the following series of statements the rates of pay awarded by the arbitration board are compared with the rates in effect before the award. The statements show the highest, lowest, and average rates of pay of the various classes of employees in effect before and after the award and the amount and per cent of the wage increases granted by the board of arbitration.

The result of the award in the case of maintenance-of-way foremen paid on a monthly basis, as shown by the table below, was a uniform increase of \$2.50 per month, the average increase on a percentage basis amounting to 3.4 per cent. The rates of pay of maintenance-ofway foremen paid at hourly rates were advanced 1 cent per hour, or

2.7 per cent.

Amount and per cent of increase in rates of pay of maintenance-of-way foremen as a result of the award of the board of arbitration.

	Rates	Rates	Incr	ease.
Lowest amount received per month	award.	award.	\$2.50	Per cent.
Highest amount received per month Average amount received per month Average amount received per hour	72.86	96. 10 75. 36 . 38	2.50 2.50 .01	3. 9 2. 7 3. 4 2. 7

The rates of pay of maintenance-of-way engineers and firemen as a result of the award were increased \$2 per month, these equivalent increases, on a percentage basis, in the case of engineers, ranging from 2.7 to 3.6 per cent, with an average of 3.2 per cent. advance of \$2 per month received by firemen amounted to an increase of 4 per cent.

Amount and per cent of increase in rates of pay of maintenance-of-way engineers and firemen as a result of the award of the board of arbitration.

	Rates	Rates	Incr	ease.
	before award.	after award.	Amount.	Per cent.
ENGINEERS.  Lowest amount received per month.  Highest amount received per month.  Average amount received per month	\$55.00	\$57.00	\$2.00	3. 6
	75.00	77.00	2.00	2. 7
	63.33	65.33	2.00	3. 2
Lowest amount received per month.  Highest amount received per month.  Average amount received per month.	50. 00	52.00	2.00	4.0
	50. 00	52.00	2.00	4.0
	50. 00	52.00	2.00	4.0

In the following table comparative figures are presented of the rates of pay of maintenance-of-way pumpers before and after the award. The rates of compensation of these employees were advanced \$2 per month, the percentages of increase over the preexisting rates ranging from 3.5 to 4.3 per cent, with an average of 3.7 per cent.

Amount and per cent of increase in rates of pay of maintenance-of-way pumpers as a result of the award of the board of arbitration.

	Rates	Rates	Incr	ease.
		after award.	Amount.	Per cent.
Lowest amount received per month.  Highest amount received per month.  Average amount received per month.	\$47.00 57.00 54.00	\$49.00 59.00 56.00	\$2.00 2.00 2.00	4.3 3.5 3.7

The result of the arbitration award in the case of maintenance-of-way watchmen as shown below was an increase in the rates of pay of these employees ranging from 5 to 10 cents a day, the average increase on a percentage basis amounting to 4.4 per cent.

Amount and per cent of increase in rates of pay of maintenance-of-way watchmen as a result of the award of the board of arbitration.

	Rates before	Rates	Incr	ease.
		award.	Amount.	Per cent.
Lowest amount received per day of 12 hours.  Highest amount received per day of 12 hours.  Average amount received per day of 12 hours.	\$1.50 1.70 1.60	\$1.60 1.75 1.67	\$0. 10 . 05 . 07	6. 7 2. 9 4. 4

The result of the arbitration award in the case of maintenance-ofway tinners was an average increase of 1 cent an hour, or 3.3 per cent. Amount and per cent of increase in rates of pay of maintenance-of-way tinners as a result of the award of the board of arbitration.

	Rates before	Rates	Incr	ease.
	bwomo bwomo	Amount.	Per cent.	
Lowest amount received per hour. Highest amount received per hour. Average amount received per hour.	33.0	Cents. 30.0 33.0 31.0	Cents. 2.5 0.0 1.0	9.1 0.0 3.3

The three tables next submitted show the amount and per cent of increase in the rates of pay of maintenance-of-way masons, carpenters, and painters as a result of the arbitration award. The rates of compensation of these employees were advanced 1 cent per hour, which was equivalent to an average increase of 2.8 per cent for masons, 3.6 per cent for carpenters, and 3.4 per cent for painters.

Amount and per cent of increase in rates of pay of maintenance-of-way masons as a result of the award of the board of arbitration.

	before after	Rates	Increase.		
		award.	Amount.	Per cent.	
Lowest amount received per hour	36.5	Cents. 21. 5 37. 5 29. 5	Cents. 1.0 1.0 1.0	4.9 2.7 3.5	

Amount and per cent of increase in rates of pay of maintenance-of-way carpenters as a result of the award of the board of arbitration.

	Rates	Rates	Incr	ease.
	before after award.		Amount.	Per cent.
Lowest amount received per hour. Highest amount received per hour. Average amount received per hour.	27.5	Cents, 22. 5 28. 5 25. 5	Cents. 1.0 1.0 1.0	4.7 3.6 4.1

Amount and per cent of increase in rates of pay of maintenance-of-way painters as a result of the award of the board of arbitration.

	Rates before award.	after	Increase.	
			Amount.	Per cent.
Lowest amount received per hour. Highest amount received per hour. Average amount received per hour.	Cents. 22.0 29.5 26.0	Cents. 23.0 30.5 27.0	Cents. 1.0 1.0 1.0	4.6 3.4 3.9

The following table shows the changes in rates of pay as a result of the arbitration award of the various classes of unskilled and semiskilled laborers included in the movement. The minimum increase in the case of these employees was an advance of one-half a cent an hour as compared with a maximum increase of 1 cent per hour, these increases on a percentage basis ranging from 2.8 to 6.7 per cent.

Amount and per cent of increase in rates of pay of maintenance-of-way laborers as a result of the award of the board of arbitration.

	Rates before award.	Rates	Increase.	
,		award.1	Amount.	Per cent.
Lowest amount received per hour.  Highest amount received per hour.  Average amount received per hour	Cents. 15. 0 18. 0 16. 8	Cents. 16. 0 18. 5 17. 5	Cents. 1.0 .5 .7	6. 7 2. 8 4. 2

 $<sup>{</sup>f 1}$  Rates of pay for laborers when working overtime and on Sundays or legal holidays fixed at 5 cents per hour in addition to regular pay.

In the following table is shown the amount and per cent of increase awarded by the arbitration board in the rates of extra compensation allowed maintenance-of-way employees, of the classes designated, when engaged in certain specified branches of employment. The wage increases shown in this table amounted to an advance of 1 cent an hour, which was equivalent to an increase of 33½ per cent, with one exception in which the increase was 50 per cent.

Amount and per cent of increase in rates of extra compensation of maintenance-of-way employees as a result of the award of the board of arbitration.

	Rates before award.	Rates after award.	Increase.	
			Amount.	Per cent.
All mason foremen required to work at Durmid, Pepper, Poca- hontas, Dingers, and Coleman tunnels and tunnels on Wide- mouth Branch.	Per hour. \$0.03	Per hour. \$0.04	\$0.01	33. 3
Carpenters, carpenter laborers, masons, mason helpers, and laborers while actually engaged in work in Durmid, Pepper, Pocahontas, Dingers, and Coleman tunnels and tunnels on Widemouth Branch.  Track laborers, while actually engaged in following-named tunnels: Lynchburg, Durmid, Montgomery, Pepper, Little Tom, Holbrook, Big Bull, Creagan, Keiser, Honaker, Pocahontas, Elkhorn, Hatfield, Dingers, and tunnels 1, 3, 4, 6, and 7 on Big	. 03	. 04	.01	33,3
Sandy and the tunnels on Widemouth Branch and between Vivian and Jaeger, including Dry Fork Branch.  Carpenters, when erecting or riveting steel bridge work, on spans of 40 feet or over	.02	.03	.01	50. 0 33. 3

# XXVI.

# AMALGAMATED ASSOCIATION OF THE AMERICAN STREET AND RAILWAY EMPLOYEES OF AMERICA AND THE YOUNGSTOWN & OHIO RIVER RAILROAD CO.; 1911.

These proceedings were held under an agreement to arbitrate certain questions in dispute between the Youngstown & Ohio River Railroad Co. and division No. 530 of Leetonia, Ohio, of the Amalgamated Association of the American Street and Railway Employees. This agreement was made on January 17, 1911.

W. A. O'Grady was selected by the association as its arbitrator. Martin Ackerman was selected by the railroad company as its

arbitrator.

These two failing to agree upon a third arbitrator, upon request, the presiding judge of the United States Commerce Court appointed William L. Chambers of Washington, D. C., as the third arbitrator.

The question submitted to arbitration was the alleged dismissal of two of the company's employees, A. J. Avery, conductor, and H. C. Martin, motorman, for failure to comply with a certain "Meet and report order," given to the said Avery and Martin on February 6, 1911. On the same day they were called to the offices of the general manager of the company, J. D. Dewees, and after a conference with him signed certain resignations which it was claimed on the part of Avery and Martin were signed because they were told by Mr. Dewees that they would be discharged if they were not signed; the company claimed that the resignations were a free, voluntary act on the part of the men.

The board of arbitrators convened at the Columbia Hotel, Leetonia, Ohio, at 10 a.m., March 10, 1911, and organized by the selec-

tion of William L. Chambers as chairman of the board.

The facts, as disclosed by the evidence submitted in the form of depositions, taken in the presence of the arbitrators, was substantially as follows:

On the morning of February 6, 1911, at 7.45 a. m., a train order was issued by the dispatcher of the Youngstown & Ohio River Railroad Co. to Conductor Avery and Motorman Martin of train No. 5, then ready to leave the depot at Leetonia for Salem. This order required this train to meet a train coming from Salem to Leetonia at Washingtonville Junction and to report to the dispatcher upon their arrival at Washingtonville Junction. Conductor Avery testified that he did not read that portion of the order which required him to report at Washingtonville Junction, but that he signed the same and admitted that the copy of the order in evidence bears his signature, and that the copy of the order handed to him at the time and which he had in his possession when he made the trip in question required a report to be made at Washingtonville Junction was that he did not know then that the order required him to do so. Upon his arrival at Salem the dispatcher at Leetonia asked Avery over the telephone why he did not report at Washingtonville Junction, to which he replied that he had no instructions to report there, but on examination of his order he discovered that it did require him to make such report. He immediately reported the matter to General

Manager Dewees, who was on the train coming from Salem, who at once told him that the matter was a serious one, and later in the day both Conductor Avery and Motorman Martin were called into the office of the general manager, who informed them that their failure to make the report was so serious that it could not be overlooked. A discussion of the subject followed, in which the men were informed that they would have to leave the service of the company, but they were told they would be allowed to resign. The men regarded this as the only alternative of a discharge, and promptly handed in their resignations in writing. Copies of these resignations were introduced in evidence.

The board of arbitrators rendered its decision in the case on March 13, 1911, which was as follows:

We are of opinion that the failure to report at Washingtonville Junction was a violation of the rules and a distinct failure to comply with the order and that the manager of the road unquestionably had the right which he exercised of administering disci-pline, and while dismissal from the service was the severest punishment he could impose he had the right to inflict it, and we think it would be a criticism on our part, which we do not feel justified in making, to say that the punishment was unduly severe. There was a heavy responsibility resting upon the manager in the premises but he knew there was a much heavier responsibility resting upon the company whose management was intrusted in his hands. His responsibility to the company was personal. He also owed a moral responsibility of the highest character to the public, but the responsibility of the company was not only moral but legal, and the manager knew that no action of his could relieve his employer, the company, from legal liability. If the retention of these men in the employ of the company should be followed by an accident, in which either property was destroyed or lives lost as a result of the failure on their part to comply with orders, there could be no possible excuse from public censure and legal liability for damages, aggravated by the action of the company in retaining them in its employ; so that Manager Dewees was justified in the discipline administered equally on the ground of his personal responsibility to the company, his moral responsibility to the public, and as the representative of the company itself, and we do not think we would be justified in requiring the reinstatement of the men. So far as this feature of the matter is concerned we are of the opinion that the company should determine its own course, but if the company should con-clude to reinstate the men, such reinstatement within 60 days from the date of their resignation would not contravene the spirit of this decision.

The decision of the board, as above quoted, was signed by arbitrators William L. Chambers and Martin Ackerman. Arbitrator W. A. O'Grady dissented and filed a dissenting opinion.

# XXVII.

# APPENDIX A.

# FEDERAL LEGISLATION RELATIVE TO THE MEDIATION AND ARBITRATION OF RAILWAY LABOR DISPUTES.

I.

[Public-No. 6.]

[S. 2517.]

AN ACT Providing for mediation, conciliation, and arbitration in controversies between certain employers and their employees.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of this act shall apply to any common carrier or carriers and their officers, agents, and employees, except masters of vessels and seamen, as defined in section forty-six hundred and twelve, Revised Statutes of the United States, engaged in the transportation of passengers or property wholly by railroad, or partly by railroad and partly by water, for a continuous carriage or shipment from one State or Territory of the United States or the District of Columbia to any other State or Territory of the United States or the District of Columbia, or from any place in the United States to an adjacent foreign country, or from any place in the United States through a foreign country to any other place in the United States. The term "railroad" as used in this act shall include all bridges and ferries used

or operated in connection with any railroad, and also all the road in use by any corporation operating a railroad, whether owned or operated under a contract, agreement, or lease; and the term "transportation" shall include all instrumentalities of shipment

or carriage.

The term "employees" as used in this act shall include all persons actually engaged in any capacity in train operation or train service of any description, and notwithstanding that the cars upon or in which they are employed may be held and operated by the carrier under lease or other contract: *Provided*, *however*, That this act shall not be held to apply to employees of street railroads and shall apply only to employees engaged in railroad train service. In every such case the carrier shall be responsible for the acts and defaults of such employees in the same manner and to the same extent as if said cars were owned by it and said employees directly employed by it, and any provisions to the contrary of any such lease or other contract shall be binding only as between the parties thereto and shall not affect the obligations of said carrier either to the public or to the private parties concerned.

A common carrier subject to the provisions of this act is hereinafter referred to as an "employer," and the employees of one or more of such carriers are hereinafter referred to as "employees."

Sec. 2. That whenever a controversy concerning wages, hours of labor, or conditions of employment shall arise between an employer or employers and employees subject to this act interrupting or threatening to interrupt the business of said employer or employers to the serious detriment of the public interest, either party to such controversy may apply to the Board of Mediation and Conciliation created by this act and invoke its services for the purpose of bringing about an amicable adjustment of the controversy; and upon the request of either party the said board shall with all practicable expedition put itself in communication with the parties to such controversy and shall use its best efforts, by mediation and conciliation, to bring them to an agreement; and if such efforts to bring about an amicable adjustment through mediation and conciliation shall be unsuccessful, the said board shall at once endeavor to induce the parties to submit their controversy to arbitration in accordance with the provisions of this act.

In any case in which an interruption of traffic is imminent and fraught with serious detriment to the public interest, the Board of Mediation and Conciliation may, if in its judgment such action seem desirable, proffer its services to the respective parties

to the controversy.

In any case in which a controversy arises over the meaning or the application of any agreement reached through mediation under the provisions of this act either party to the said agreement may apply to the Board of Mediation and Conciliation or an expression of opinion from such board as to the meaning or application of such agreement and the said board shall upon receipt of such request give its opinion as soon as may be practicable.

SEC. 3. That whenever a controversy shall arise between an employer or employers and employees subject to this act, which can not be settled through mediation and conciliation in the manner provided in the preceding section, such controversy may be submitted to the arbitration of a board of six, or, if the parties to the controversy prefer so to stipulate, to a board of three persons, which board shall be chosen in the following manner: In the case of a board of three, the employer or employers and the employees, parties respectively to the agreement to arbitrate, shall each name one arbitrator; and the two arbitrators thus chosen shall select the third arbitrator; but in the event of their failure to name the third arbitrator within five days after their first meeting, such third arbitrator shall be named by the Board of Mediation and In the case of a board of six, the employer or employers and the em-Conciliation. ployees, parties respectively to the agreement to arbitrate, shall each name two arbitrators, and the four arbitrators thus chosen shall, by a majority vote, select the remaining two arbitrators; but in the event of their failure to name the two arbitrators within fifteen days after their first meeting the said two arbitrators, or as many of them as have not been named, shall be named by the Board of Mediation and Conciliation.

In the event that the employees engaged in any given controversy are not members of a labor organization, such employees may select a committee which shall have the right to name the arbitrator, or the arbitrators, who are to be named by the employees

as provided above in this section.

Sec. 4. That the agreement to arbitrate—

First. Shall be in writing;

Second. Shall stipulate that the arbitration is had under the provisions of this act; Third. Shall state whether the board of arbitration is to consist of three or six members;

Fourth. Shall be signed by duly accredited representatives of the employer or

employers and of the employees;

Fifth. Shall state specifically the questions to be submitted to the said board for decision;
Sixth. Shall stipulate that a majority of said board shall be competent to make a

valid and binding award;

Seventh. Shall fix a period from the date of the appointment of the arbitrator or arbitrators necessary to complete the board, as provided for in the agreement, within which the said board shall commence its hearings;

Fighth. Shall fix a period from the beginning of the hearings within which the said board shall make and file its award: Provided, That this period shall be thirty

days unless a different period be agreed to;

Ninth. Shall provide for the date from which the award shall become effective and shall fix the period during which the said award shall continue in force;

Tenth. Shall provide that the respective parties to the award will each faithfully

execute the same;

Eleventh. Shall provide that the award and the papers and proceedings, including the testimony relating thereto, certified under the hands of the arbitrators, and which shall have the force and effect of a bill of exceptions, shall be filed in the clerk's office of the district court of the United States for the district wherein the controversy arises or the arbitration is entered into, and shall be final and conclusive upon the parties to the agreement unless set aside for error of law apparent on the record;

Twelfth. May also provide that any difference arising as to the meaning or the application of the provisions of an award made by a board of arbitration shall be referred back to the same board or to a subcommittee of such board for a ruling, which ruling shall have the same force and effect as the original award; and if any member of the original board is unable or unwilling to serve, another arbitrator shall be named

in the same manner as such original member was named.

Sec. 5. That for the purposes of this act the arbitrators herein provided for, or either of them, shall have power to administer oaths and affirmations, sign subpoenas, require the attendance and testimony of witnesses, and the production of such books, papers, contracts, agreements, and documents material to a just determination of the matters under investigation as may be ordered by the court; and may invoke the aid of the United States courts to compel witnesses to attend and testify and to produce such books, papers, contracts, agreements, and documents to the same extent and under the same conditions and penalties as is provided for in the act to regulate commerce, approved February fourth, eighteen hundred and eightyseven, and the amendments thereto.

SEC. 6. That every agreement of arbitration under this act shall be acknowledged by the parties thereto before a notary public or a clerk of the district or the circuit court of appeals of the United States, or before a member of the Board of Mediation and Conciliation, the members of which are hereby authorized to take such acknowledgments; and when so acknowledged shall be delivered to a member of said board

or transmitted to said board to be filed in its office.

When such agreement of arbitration has been filed with the said board, or one of its members, and when the said board, or a member thereof, has been furnished the names of the arbitrators chosen by the respective parties to the controversy, the board, or a member thereof, shall cause a notice in writing to be served upon the said arbitrators, notifying them of their appointment, requesting them to meet promptly to name the remaining arbitrator or arbitrators necessary to complete the board, and advising them of the period within which, as provided in the agreement of arbitration, they are empowered to name such arbitrator or arbitrators.

When the arbitrators selected by the respective parties have agreed upon the remaining arbitrator or arbitrators, they shall notify the Board of Mediation and Conciliation; and in the event of their failure to agree upon any or upon all of the necessary arbitrators within the period fixed by this act they shall, at the expiration of such period, notify the Board of Mediation and Conciliation of the arbitrators selected,

if any, or of their failure to make or to complete such selection.

If the parties to an arbitration desire the reconvening of a board to pass upon any controversy arising over the meaning or application of an award, they shall jointly so notify the Board of Mediation and Conciliation, and shall state in such written notice the question or questions to be submitted to such reconvened board. The Board of Mediation and Conciliation shall thereupon promptly communicate with the members of the board of arbitration or a subcommittee of such board appointed for such purpose pursuant to the provisions of the agreement of arbitration, and arrange for the reconvening of said board or subcommittee, and shall notify the respective parties to the controversy of the time and place at which the board will meet

for hearings upon the matters in controversy to be submitted to it.

Sec. 7. That the board of arbitration shall organize and select its own chairman and make all necessary rules for conducting its hearings; but in its award or awards the said board shall confine itself to findings or recommendations as to the questions specifically submitted to it or matters directly bearing thereon. All testimony before said board shall be given under oath or affirmation, and any member of the board of arbitration shall have the power to administer oaths or affirmations. It may employ such assistants as may be necessary in carrying on its work. It shall, whenever practicable, be supplied with suitable quarters in any Federal building located at its place of meeting or at any place where the board may adjourn for its deliberations. The board of arbitration shall furnish a certified copy of its awards to the respective parties to the controversy, and shall transmit the original, together with the papers and proceedings and a transcript of the testimony taken at the hearings, certified under the hands of the arbitrators, to the clerk of the district court of the United States for the district wherein the controversy arose or the arbitration is entered into, to be filed in said clerk's office as provided in paragraph eleven of section four of this act. And said board shall also furnish a certified copy of its award, and the papers and proceedings, including the testimony relating thereto, to the Board of Mediation and Conciliation, to be filed in its office.

The United States Commerce Court, the Interstate Commerce Commission, and the Bureau of Labor Statistics are hereby authorized to turn over to the Board of Mediation and Conciliation upon its request any papers and documents heretofore filed with them and bearing upon mediation or arbitration proceedings held under the provisions of the act approved June first, eighteen hundred and ninety-eight,

providing for mediation and arbitration.

SEC. 8. That the award, being filed in the clerk's office of a district court of the United States as hereinbefore provided, shall go into practical operation, and judgment shall be entered thereon accordingly at the expiration of ten days from such filing, unless within such ten days either party shall file exceptions thereto for matter of law apparent upon the record, in which case said award shall go into practical operation, and judgment be entered accordingly, when such exceptions shall have been finally disposed of either by said district court or on appeal therefrom.

At the expiration of ten days from the decision of the district court upon exceptions taken to said award as aforesaid judgment shall be entered in accordance with said decision, unless during said ten days either party shall appeal therefrom to the circuit court of appeals. In such case only such portion of the record shall be transmitted to the appellate court as is necessary to the proper understanding and consideration of the questions of law presented by said exceptions and to be decided.

The determination of said circuit court of appeals upon said questions shall be final, and, being certified by the clerk thereof to said district court, judgment pursuant thereto shall thereupon be entered by said district court.

If exceptions to an award are finally sustained, judgment shall be entered setting aside the award in whole or in part; but in such case the parties may agree upon a judgment to be entered disposing of the subject matter of the controversy, which judgment when entered shall have the same force and effect as judgment entered upon an award.

Nothing in this act contained shall be construed to require an employee to render personal service without his consent, and no injunction or other legal process shall be issued which shall compel the performance by any employee against his will of a

contract for personal labor or service.

Sec. 9. That whenever receivers appointed by a Federal court are in the possession and control of the business of employers covered by this act the employees of such employers shall have the right to be heard through their representatives in such court upon all questions affecting the terms and conditions of their employment, and no reduction of wages shall be made by such receivers without the authority of the court therefor, after notice to such employees, said notice to be given not less than twenty days before the hearing upon the receivers' petition or application, and to be posted upon all customary bulletin boards along or upon the railway or in the customary places on the premises of other employers covered by this act.

Sec. 10. That each member of the board of arbitration created under the provi-

sions of this act shall receive such compensation as may be fixed by the Board of Mediation and Conciliation, together with his traveling and other necessary expenses. The sum of \$25,000, or so much thereof as may be necessary, is hereby appropriated to be immediately available and to continue available until the close of the fiscal year ending June thirtieth, nineteen hundred and fourteen, for the necessary and proper expenses incurred in connection with any arbitration or with the carrying on of the work of mediation and conciliation, including per diem, traveling, and other necessary expenses of members or employees of boards of arbitration and rent in the District of Columbia, furniture, office fixtures and supplies, books, salaries, traveling expenses, and other necessary expenses of members or employees of the Board of Mediation and Conciliation, to be approved by the chairman of said board and audited by the proper accounting officers of the Treasury.

SEC. 11. There shall be a Commissioner of Mediation and Conciliation, who shall be appointed by the President, by and with the advice and consent of the Senate, and whose salary shall be \$7,500 per annum, who shall hold his office for a term of seven years and until a successor qualifies, and who shall be removable by the President only for misconduct in office. The President shall also designate not more than two other officials of the Government who have been appointed by and with the advice and consent of the Senate, and the officials thus designated, together with the Commissioner of Mediation and Conciliation, shall constitute a board to be known

as the United States Board of Mediation and Conciliation,

There shall also be an Assistant Commissioner of Mediation and Conciliation, who shall be appointed by the President, by and with the advice and consent of the Senate, and whose salary shall be \$5,000 per annum. In the absence of the Commissioner of Mediation and Conciliation, or when that office shall become vacant, the assistant commissioner shall exercise the functions and perform the duties of that office. Under the direction of the Commissioner of Mediation and Conciliation, the assistant commissioner shall assist in the work of mediation and conciliation, and when acting alone in any case he shall have the right to take acknowledgments, receive agreements of arbitration, and cause the notices in writing to be served upon the arbitrators chosen by the respective parties to the controversy, as provided for in section five of

The act of June first, eighteen hundred and ninety-eight, relating to the mediation and arbitration of controversies between railway companies and certain classes of their employees is hereby repealed: *Provided*, That any agreement of arbitration which, at the time of the passage of this act, shall have been executed in accordance with the provisions of said act of June first, eighteen hundred and ninety-eight, shall be governed by the provisions of said act of June first, eighteen hundred and ninetyeight, and the proceedings thereunder shall be conducted in accordance with the

provisions of said act.

Approved, July 15, 1913.

II.

[PUBLIC-No. 115.]

AN ACT Concerning carriers engaged in interstate commerce and their employees.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the provisions of this act shall apply to any common carrier or carriers and their officers, agents, and employees, except masters of vessels and seamen, as defined in section forty-six hundred and twelve, Revised Statutes of the United States, engaged in the transportation of passengers or property wholly by railroad, or partly by railroad and partly by water, for a continuous carriage or shipment, from one State or Territory of the United States, or the District of Columbia, to any other State or Territory of the United States, or the District of Columbia, or from any place in the United States to an adjacent foreign country, or from any place in the United States through a foreign country to any other place in the United States.

The term "railroad" as used in this act shall include all bridges and ferries used or operated in connection with any railroad, and also all the road in use by any corporation operating a railroad, whether owned or operated under a contract, agreement, or lease; and the term "transportation" shall include all instrumentalities of ship-

ment or carriage.

The term "employees" as used in this act shall include all persons actually engaged in any capacity in train operation or train service of any description, and notwithstanding that the cars upon or in which they are employed may be held and operated by the carrier under lease or other contract: Provided, however, That this act shall not be held to apply to employees of street railroads and shall apply only to employees engaged in railroad train service. In every such case the carrier shall be responsible for the acts and defaults of such employees in the same manner and to the same extent as if said cars were owned by it and said employees directly employed by it, and any provisions to the contrary of any such lease or other contract shall be binding only as between the parties thereto and shall not affect the obligations of said carrier either to the public or to the private parties concerned.

Sec. 2. That whenever a controversy concerning wages, hours of labor, or conditions of employment shall arise between a carrier subject to this act and the employees of such carrier, seriously interrupting or threatening to interrupt the business of said carrier, the chairman of the Interstate Commerce Commission and the Commissioner of Labor shall, upon the request of either party to the controversy, with all practicable expedition, put themselves in communication with the parties to such controversy, and shall use their best efforts, by mediation and conciliation, to amicably settle the same; and if such efforts shall be unsuccessful, shall at once endeavor to bring about an arbitration of said controversy in accordance with the provisions of this act.

SEC. 3. That whenever a controversy shall arise between a carrier subject to this act and the employees of such carrier which can not be settled by mediation and conciliation in the manner provided in the preceding section, said controversy may be submitted to the arbitration of a board of three persons, who shall be chosen in the manner following: One shall be named by the carrier or employer directly interested; the other shall be named by the labor organization to which the employees directly interested belong, or, if they belong to more than one, by that one of them which specially represents employees of the same grade and class and engaged in services of the same nature as said employees of directly interested: Provided, however, That when a controversy involves and affects the interests of two or more classes and grades of employees belonging to different labor organizations, such arbitrator shall be agreed upon and designated by the concurrent action of all such labor organizations; and in cases where the majority of such employees are not members of any labor organization, said employees may by a majority vote select a committee of their own number, which committee shall have the right to select the arbitrator on behalf of said The two thus chosen shall select the third commissioner of arbitration; but, in the event of their failure to name such arbitrator within five days after their first meeting, the third arbitrator shall be named by the commissioners named in the preceding section. A majority of said arbitrators shall be competent to make a valid and binding award under the provisions hereof. The submission shall be in writing, shall be signed by the employer and by the labor organization representing the employees, shall specify the time and place of meeting of said board of arbitration, shall state the questions to be decided, and shall contain appropriate provisions by which the respective parties shall stipulate, as follows:

First. That the board of arbitration shall commence their hearings within ten days from the date of the appointment of the third arbitrator, and shall find and file their award, as provided in this section, within thirty days from the date of the appointment of the third arbitrator; and that pending the arbitration the status existing immediately prior to the dispute shall not be changed: *Provided*, That no employee shall be

compelled to render personal service without his consent.

Second. That the award and the papers and proceedings, including the testimony relating thereto certified under the hands of the arbitrators and which shall have the force and effect of a bill of exceptions, shall be filed in the clerk's office of the circuit court of the United States for the district wherein the controversy arises or the arbitration is entered into, and shall be final and conclusive upon both parties, unless set aside for error of law apparent on the record.

Third. That the respective parties to the award will each faithfully execute the same, and that the same may be specifically enforced in equity so far as the powers of a court of equity permit: *Provided*, That no injunction or other legal process shall be issued which shall compel the performance by any laborer against his will of a contract for

personal labor or service.

Fourth. That employees dissatisfied with the award shall not by reason of such dissatisfaction quit the service of the employer before the expiration of three months from and after the making of such award without giving thirty days' notice in writing of their intention so to quit. Nor shall the employer dissatisfied with such award dismiss any employee or employees on account of such dissatisfaction before the expiration of three months from and after the making of such award without giving thirty days' notice in writing of his intention so to discharge.

Fifth. That said award shall continue in force as between the parties thereto for the period of one year after the same shall go into practical operation, and no new arbitration upon the same subject between the same employer and the same class of employees shall be had until the expiration of said one year if the award is not set aside as provided in section four. That as to individual employees not belonging to the labor organization or organizations which shall enter into the arbitration, the said arbitration and the award made therein shall not be binding, unless the said individual

employees shall give assent in writing to become parties to said arbitration.

SEC. 4. That the award being filed in the clerk's office of a circuit court of the United States, as hereinbefore provided, shall go into practical operation, and judgment shall be entered thereon accordingly at the expiration of ten days from such filing, unless within such ten days either party shall file exceptions thereto for matter of law apparent upon the record, in which case said award shall go into practical operation and judgment be entered, accordingly when such exceptions shall have been finally disposed of either by said circuit court or on appeal therefrom.

At the expiration of ten days from the decision of the circuit court upon exceptions taken to said award, as aforesaid, judgment shall be entered in accordance with said decision unless during said ten days either party shall appeal therefrom to the circuit court of appeals. In such case only such portion of the record shall be transmitted to the appellate court as is necessary to the proper understanding and consideration of

the questions of law presented by said exceptions and to be decided.

The determination of said circuit court of appeals upon said questions shall be final, and being certified by the clerk thereof to said circuit court, judgment pursuant thereto shall thereupon be entered by said circuit court.

If exceptions to an award are finally sustained, judgment shall be entered setting aside the award. But in such case the parties may agree upon a judgment to be entered disposing of the subject matter of the controversy, which judgment when entered shall have the same force and effect as judgment entered upon an award.

Sec. 5. That for the purposes of this act the arbitrators herein provided for, or either of them, shall have power to administer oaths and affirmations, sign subpœnas, require the attendance and testimony of witnesses, and the production of such books, papers, contracts, agreements, and documents material to a just determination of the matters under investigation as may be ordered by the court; and may invoke the aid of the United States courts to compel witnesses to attend and testify and to produce such books, papers, contracts, agreements and documents to the same extent and under the same conditions and penalties as is provided for in the act to regulate commerce, approved February fourth, eighteen hundred and eighty-seven, and the amendments thereto.

SEC. 6. That every agreement of arbitration under this act shall be acknowledged by the parties before a notary public or clerk of a district or circuit court of the United States, and when so acknowledged a copy of the same shall be transmitted to the chairman of the Interstate Commerce Commission, who shall file the same in the office

of said commission.

Any agreement of arbitration which shall be entered into conforming to this act, except that it shall be executed by employees individually instead of by a labor organization as their representative, shall, when duly acknowledged as herein provided, be transmitted to the chairman of the Interstate Commerce Commission, who shall cause a notice in writing to be served upon the arbitrators, fixing a time and place for a meeting of said board, which shall be within fifteen days from the execution of said agreement of arbitration: Provided, however, That the said chairman of the Interstate Commerce Commission shall decline to call a meeting of arbitrators under such agreement unless it be shown to his satisfaction that the employees signing the submission represent or include a majority of all employees in the service of the same employer and of the same grade and class, and that an award pursuant to said submission can justly be regarded as binding upon all such employees.

SEC. 7. That during the pendency of arbitration under this act it shall not be lawful for the employer, party to such arbitration, to discharge the employees, parties thereto, except for inefficiency, violation of law, or neglect of duty; nor for the organization representing such employees to order, nor for the employees to unite in, aid, or abet, strikes against said employer; nor, during a period of three months after an award under such an arbitration, for such employer to discharge any such employees, except for the causes aforesaid, without giving thirty days' written notice of an intent so to

discharge; nor for any of such employees, during a like period, to quit the service of said employer without just cause, without giving to said employer thirty days' written notice of an intent so to do; nor for such organization representing such employees to order, counsel, or advise otherwise. Any violation of this section shall subject the offending party to liability for damages: *Provided*, That nothing herein contained shall be construed to prevent any employer, party to such arbitration, from reducing the number of its or his employees whenever in its or his judgment business necessities

require such reduction.

Sec. 8. That in every incorporation under the provisions of chapter five hundred and sixty-seven of the United States Statutes of eighteen hundred and eighty-five and eighteen hundred and eighty-six it must be provided in the articles of incorpora-tion and in the constitution, rules, and by-laws that a member shall cease to be such by participating in or by instigating force or violence against persons or property during strikes, lockouts, or boycotts, or by seeking to prevent others from working through violence, threats, or intimidations. Members of such incorporations shall not be personally liable for the acts, debts, or obligations of the corporations, nor shall such corporations be liable for the acts of members or others in violation of law; and such corporations may appear by designated representatives before the board created by this act, or in any suits or proceedings for or against such corporations or their members in any of the Federal courts.

SEC. 9. That whenever receivers appointed by Federal courts are in the possession and control of railroads, the employees upon such railroads shall have the right to be heard in such courts upon all questions affecting the terms and conditions of their employment, through the officers and representatives of their associations, whether incorporated or unincorporated, and no reduction of wages shall be made by such receivers without the authority of the court therefor upon notice to such employees, said notice to be not less than twenty days before the hearing upon the receivers' petition or application, and to be posted upon all customary bulletin boards along

or upon the railway operated by such receiver or receivers.

Sec. 10. That any employer subject to the provisions of this act, and any officer, agent, or receiver of such employer who shall require any employee, or any person seeking employment, as a condition of such employment, to enter into an agreement, either written or verbal, not to become or remain a member of any labor corporation, association, or organization; or shall threaten any employee with loss of employment, or shall unjustly discriminate against any employee because of his membership in such a labor corporation, association, or organization; or who shall require any employee or any person seeking employment, as a condition of such employment, to enter into a contract whereby such employee or applicant for employment shall agree to contribute to any fund for charitable, social, or beneficial purposes; to release such employer from legal liability for any personal injury by reason of any benefit received from such fund beyond the proportion of the benefit arising from the employer's contribution to such fund; or who shall, after having discharged an employee, attempt or conspire to prevent such employee from obtaining employment, or who shall, after the quitting of an employee, attempt or conspire to prevent such employee from obtaining employment, is hereby declared to be guilty of a misdemeanor, and, upon conviction thereof in any court of the United States of competent jurisdiction in the district in which such offense was committed, shall be punished for each offense by a fine of not less than one hundred dollars and not more than one thousand dollars.

SEC. 11. That each member of said board of arbitration shall receive a compensation of ten dollars per day for the time he is actually employed, and his traveling and other necessary expenses; and a sum of money sufficient to pay the same, together with the traveling and other necessary and proper expenses of any conciliation or arbitration had hereunder, not to exceed ten thousand dollars in any one year, to be approved by the chairman of the Interstate Commerce Commission and audited by the proper accounting officers of the Treasury, is hereby appropriated for the fiscal years ending June thirtieth, eighteen hundred and ninety-eight, and June thirtieth, eighteen hundred and ninety-nine, out of any money in the Treasury not

otherwise appropriated.

SEC. 12. That the act to create boards of arbitration or commission for settling controversies and differences between railroad corporations and other common carriers engaged in interstate or territorial transportation of property or persons and their employees, approved October first, eighteen hundred and eighty-eight, is hereby repealed.

Approved, June 1, 1898.

III.

Act of March 4, 1911, 36 Statutes, 1397.

The President of the United States from and after the passage of this act is authorized to designate from time to time any member of the Interstate Commerce Commission or of the Court of Commerce to exercise the powers conferred and the duties imposed upon the chairman of the Interstate Commerce Commission by the provisions of the "Act concerning carriers engaged in interstate commerce and their employees," approved June first, eighteen hundred and ninety-eight; and the member so designated, during the period for which he is designated, shall have the powers now conferred by said act on the chairman of the Interstate Commerce Commission.

#### IV.

ACT CONCERNING ARBITRATION OF CONTROVERSIES BETWEEN CARRIERS ENGAGED IN INTERSTATE COMMERCE AND THEIR EMPLOYEES.

Act of October 1, 1888. Acts of 1887-88.-Chapter 1063

Section 1. Whenever differences or controversies arise between railroad or other transportation companies engaged in the transportation of property or passengers between two or more States of the United States, between a Territory and State, within the Territories of the United States, or within the District of Columbia, and the employees of said railroad companies, which differences or controversies may hinder, impede, obstruct, interrupt, or affect such transportation of property or passengers, if, upon the written proposition of either party to the controversy to submit their differences to arbitration, the other party shall accept the proposition, then and in such event the railroad company is hereby authorized to select and appoint one person, and such employee or employees, as the case may be, to select and appoint another person, and the two persons thus selected and appointed to select a third person, all three of whom shall be citizens of the United States and wholly impartial and disinterested in respect to such differences or controversies; and the three persons thus selected and appointed shall be, and they are hereby, created and constituted a board of arbitration, with the duties, powers, and privileges hereinafter set forth.

SEC. 2. The board of arbitration provided for in the first section of this act shall possess all the powers and authority in respect to administering oaths, subprenaing witnesses and compelling their attendance, preserving order during the sittings of the board, and requiring the production of papers and writings relating alone to the subject under investigation now possessed and belonging to the United States commissioners appointed by the circuit court of the United States; but in no case shall any witness be compelled to disclose the secrets or produce the records or proceedings of any labor organization of which he may be an officer or member; and said board of arbitration may appoint a clerk and employ a stenographer, and prescribe all reasonable rules and regulations, not inconsistent with the provisions of this act, looking to the speedy advancement of the differences and controversies submitted to them to a conclusion and determination. Each of said arbitrators shall take an oath to honestly, fairly, and faithfully perform his duties, and that he is not personally interested in the subject matter in controversy, which oath may be administered by any State or Territorial officer authorized to administer oaths. The third person so selected and appointed as aforesaid shall be president of said board; any order, finding, conclusion, or award made by the majority of such arbitrators shall be of the same force and effect as if all three of such arbitrators concurred therein or united in making

SEC. 3. It shall be the duty of the said board of arbitration, immediately upon their selection, to organize at the nearest practicable point to the place of the origin of the difficulty or controversy, and to hear and determine the matters of difference which may be submitted to them in writing by all the parties, giving them full opportunity to be heard on oath, in person and by witnesses, and also granting them the right to be represented by counsel; and after concluding its investigations said board shall publicly announce its decision, which, with the findings of fact upon which it is based, shall be reduced to writing and signed by the arbitrators concurring therein, and, together with the testimony taken in the case, shall be filed with the Commissioner of Labor of the United States, who shall make such decision public as soon as the same shall have been received by him.

Sec. 4. It shall be the right of any employees engaged in the controversy to appoint, by designation in writing, one or more persons to act for them in the selection of an

arbitrator to represent them upon the board of arbitration.

SEC. 5. Each member of said tribunal of arbitration shall receive a compensation of ten dollars a day for the time actually employed. That the clerk appointed by said tribunal of arbitration shall receive the same fees and compensation as clerks of United States circuit courts and district courts receive for like services. The stenographer shall receive as full compensation for his services ten cents for each folio of an hundred words of testimony taken and reduced to writing before said

arbitrators. United States marshals or other persons serving the process of said tribunal of arbitration shall receive the same fees and compensation for such services as they would receive for like services upon process issued by United States commissioners. Witnesses attending before said tribunal of arbitration shall receive the same fees as witnesses attending before United States commissioners. All of said tees and compensation shall be payable by the United States in like manner as fees and compensation are payable in criminal causes under existing laws: *Provided*, That the said tribunal of arbitration shall have power to limit the number of witnesses in each case where fees shall be paid by the United States: And provided further, That the fees and compensation of the arbitrators, clerks, stenographers, marshals, and others for service of process, and witnesses under this act shall be examined and certified by the United States district judge of the district in which the arbitration is held before they are presented to the accounting officers of the Treasury Department for settlement, and shall then be subject to the provisions of section eight hundred and fortysix of the Revised Statutes of the United States; and a sufficient sum of money to pay all expenses under this act and to carry the same into effect is hereby appropriated out of any money in the Treasury not otherwise appropriated: And provided likewise, Not more than five thousand dollars shall be expended in defraying the costs of any single investigation by the commission hereinafter provided for.

SEC. 6. The President may select two commissioners, one of whom at least shall be a resident of the State or Territory in which the controversy arises, who, together with the Commissioner of Labor, shall constitute a temporary commission for the porpose of examining the causes of the controversy, the conditions accompanying and the best means for adjusting it, the result of which examination shall be immediately reported to the President and Congress, and on the rendering of such report the services of the two commissioners shall cease. The services of the commission, to be ordered at the time by the President and constituted as herein provided, may be tendered by the President for the purpose of settling a controversy such as contemplated, either upon his own motion, or upon the application of one of the parties

to the controversy, or upon the application of the executive of the State.

SEC. 7. The commissioners provided in the preceding section shall be entitled to receive ten dollars each per day for each day's service rendered, and the expenses absolutely incurred in the performance of their duties; and the expenses of the Commissioner of Labor, acting as one of the commission, shall also be reimbursed to him. Such compensation and expenses shall be paid by the Treasurer of the United States, on proper vouchers, certified to by the Commissioner of Labor and

approved by the Secretary of the Interior.

SEC. 8. Upon the direction of the President, as hereinbefore provided, the commission shall visit the locality of the pending dispute, and shall have all the powers and authority given in section two, to a board of arbitration, and shall make careful inquiry into the cause thereof, hear all persons interested therein who may come before it, advise the respective parties what, if anything, ought to be done or submitted to either or both to adjust such dispute, and make a written decision thereof. This decision shall at once be made public, shall be recorded upon proper books of record to be kept in the office of the Commissioner of Labor, who shall cause a copy thereof to be filed with the Secretary of the State or Territory, or States or Territories, in which the controversy exists.

SEC. 9. in each case the commissioners who may be selected as provided shall, before entering upon their duties, be sworn to the faithful discharge thereof. The Commissioner of Labor shall be chairman ex officio of the commission, and may appoint one or more clerks or stenographers to act in each controversy only, which clerks or stenographers shall be compensated at a rate not exceeding six dollars per

day each, and actual expenses incurred shall be reimbursed.

Šec. 10. The Commissioner of Labor shall, as soon as possible after the passage of this act, establish such rules of proceedure as shall be approved by the President; but the commission shall permit each party to a controversy to appear in person or by counsel and to examine and cross-examine witnesses. All its proceedings shall be transacted in public, except when in consultation for the purpose of deciding upon the evidence and arguments laid before it. The chairman of the commission is hereby authorized to administer oaths to witnesses in all investigations conducted by the commission, and such witnesses shall be subprenaed in the same manner as witnesses are subprenaed to appear before United States courts and commissioners, and they shall each receive the same fees as witnesses attending before United States commissioners: Provided, That said temporary board of commissioners shall have the power to limit the number of witnesses in each case where fees shall be paid by the United States.

Sec. 11. All fees, expenses, and compensations of this commission shall be paid as

hereinbefore provided in section five of this act.



